Service
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Service Manual

Horizontal Frequency

30-83 KHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING

Revision List

Version	Release Date	Revision History	TPV Model Name
A00	Dec.-27-2012	Initial release	T9CGHG7BFXACD1E
A01	Feb.-26-2013	Add new models	T9CAHG6TFXACDNE
			T9CAHG7BFXA2DNE
			T9CAHG7BFXACDNE
			T9CAHG7KFXACDNE
			T9CGHG6TFXACDNE
			T9CGHG7BFXA2DNE
			T9CGHG7BFXACDNE
			T9CGHG7KFXACD1E
			T9CGHG7KFXACDNE

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING

Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.
Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiation when open AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.
Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person’s body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

1. Monitor Specifications

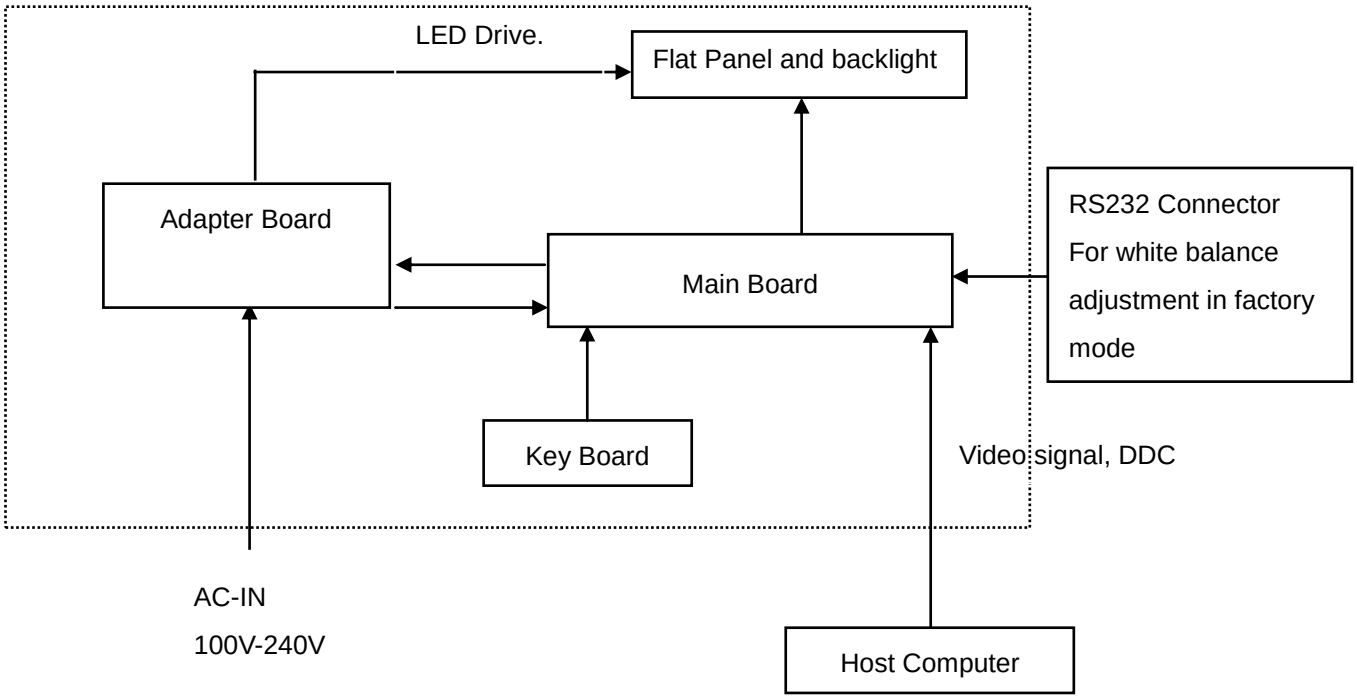
Panel	Model name	E960SRDA/ E960PRDA
	Driving system	TFT Color LCD
	Viewable Image Size	48.2cm diagonal
	Pixel pitch	0.294mm(H)X0.294mm(V)
	Video	R, G, B Analog Interface & Digital Interface
	Separate Sync.	H/V TTL
	Display Color	16.7M Colors
	Dot Clock	108MHz
Resolution	Horizontal scan range	30 kHz - 83 kHz
	Horizontal scan Size(Maximum)	376.32mm
	Vertical scan range	50 Hz - 76 Hz
	Vertical scan Size(Maximum)	301.056mm
	Optimal preset resolution	1280x 1024 (60 Hz)
	Plug & Play	VESA DDC2B/CI
	Input Connector	D-Sub 15pin; DVI 24pin
	Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, TMDS
	Power Source	100-240V~, 50/60Hz
	Power Consumption	Active: 23 W (typical)
		Standby < 0.5 W
	Off timer	0-24 hrs
	Speakers	2WX2
Physical Characteristics	Connector Type	15-pin Mini D-Sub ; DVI-D
	Signal Cable Type	Detachable
Environmental	Temperature:	
	Operating	0° to 40°
	Non-Operating	-25° to 55°
	Humidity:	
	Operating	10% to 85% (non-condensing)
	Non-Operating	5% to 93% (non-condensing)
	Altitude:	
	Operating	0~ 3658m (0~ 12000 ft)
	Non-Operating	0~ 12192m (0~ 40000 ft)

2. LCD Monitor Description

The LCD monitor will contain a main board, an adapter board, a key board which house the flat panel control logic, brightness control logic and DDC.

The power part will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.

Monitor Block Diagram



3. Operating Instructions

3.1 General Instructions

This monitor only has one external control function button; press the Power/Auto Configuration button to turn the monitor on or off.

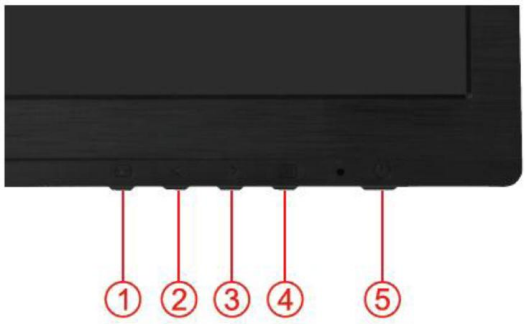
If you need to adjust other functions, please visit the official AOC website (www.aoc.com)to download and install AOC's exclusive i-Menu application software, and then perform related function adjustments to get the screen you require.

• Connect the power cord properly.

• Connect the signal cable onto the PC's graphics card.

• Push the button to start the monitor, and the power indicator will light up..

3.2 Control Buttons



E960SRDA/ E960PRDA /E2060SWDA/E2060PWDA / E2260SDA/ E2260PDA：

1	Source/Auto/Exit
2	ECO(DCR)/<
3	Volume / >
4	Menu/Enter
5	Power

Power

Press the Power button to turn on/off the monitor.

Eco (DCR)/ <

Press the Eco key continuously to select the Eco mode of brightness and DCR on when there is no OSD. (Eco mode hot key may not be available in all models).

Volume / >

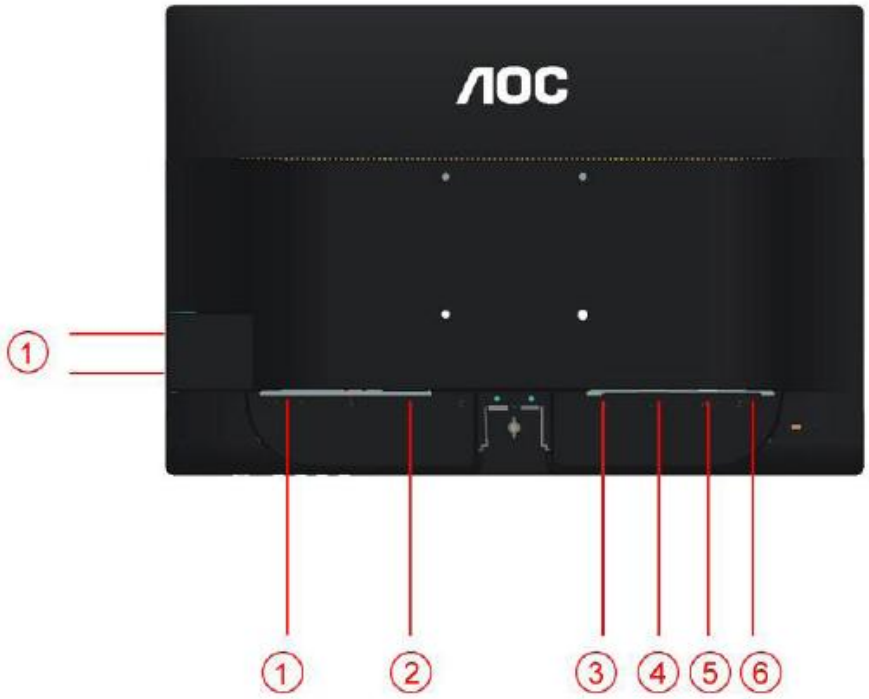
When there is no OSD,Press Volume button to active volume adjustment bar,Press <or + to adjust volume(Only for the models with speakers)

Auto / Exit

When there is no OSD, press Auto/Source button continuously about 3 second to do auto configure .

Source hot key

When the OSD is closed, press Source button will be Source hot key function. Press Source button continuously to select the input source showed in the message bar , press Menu/Enter button to change to the source selected



1	USB (Optional)
2	Power
3	/
4	DVI (Optional)
5	Analog (DB-15 VGA cable)
6	Line in (Optional)

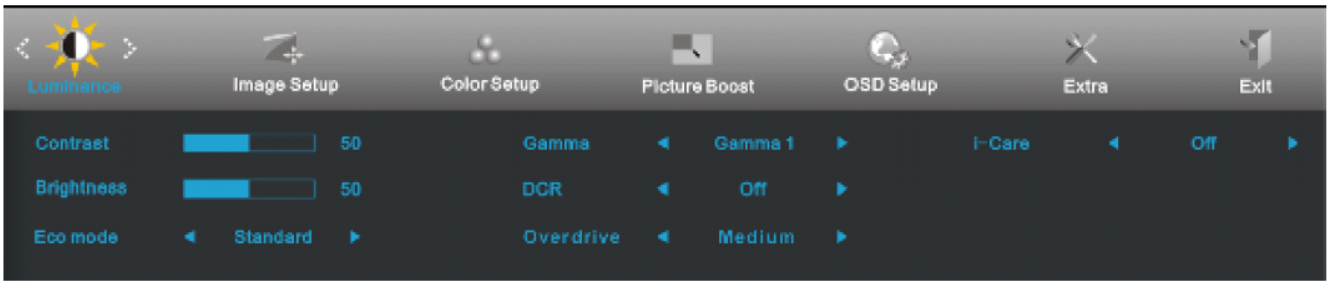
To protect equipment, always turn off the PC and LCD monitor before connecting.

1. Connect the power cable to the AC port on the back of the monitor.
2. Connect one end of the 15-pin D-Sub cable to the back of the monitor and connect the other end to the computer's D-Sub port.
3. (Optional –Requires a video card with DVI port)Connect one end of the DVI cable to the back of the monitor and connect the other end to the computer‟s DVI port.
4. /
5. (Optional)Connect the audio cable to audio in port on the back of the monitor
6. Turn on your monitor and computer.

If your monitor displays an image, installation is complete. If it does not display an image, please refer Troubleshooting.

3.3 OSD Setting

Basic and simple instruction on the control keys.



1) Press the **MENU-button** to activate the OSD window.

2) Press < or > to navigate through the functions. Once the desired function is highlighted, press the **MENU-button** to activate it . press**<** or **>**to navigate through the sub-menu functions. Once the desired function is highlighted, press **MENU-button** to activate it.

3) Press**<** or **>**to change the settings of the selected function. Press AUTO to exit. If you want to adjust any other function, repeat steps 2-3.

4) OSD Lock Function: To lock the OSD, press and hold the MENU button while the monitor is off and then press **power button** to turn the monitor on. To un-lock the OSD - press and hold the MENU button while the monitor is off and then press **power button** to turn the monitor on.

Notes:

1) If the product has only one signal input, the item of "Input Select" is disable to adjust.

2) If the product screen size is 4:3 or input signal resolution is wide format, the item of "Image Ratio" is disable to adjust.

3) One of DCR, Color Boost, and Picture Boost functions is active, the other two function is turned off accordingly.

Luminance

1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (Luminance), and press **MENU** to enter.

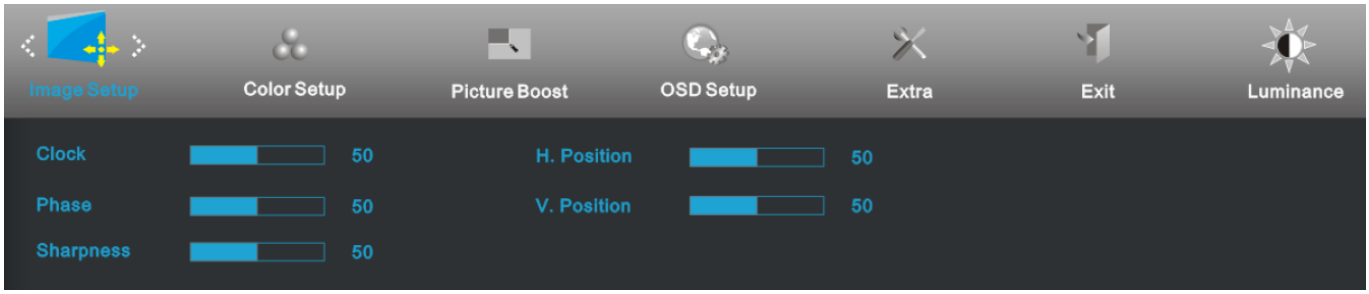
3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	Brightness	0-100		Backlight Adjustment
	Contrast	0-100		Contrast from Digital-register.
	Eco mode	Standard		Standard Mode
		Text		Text Mode
		Internet		Internet Mode
		Game		Game Mode
		Movie		Movie Mode
		Sports		Sports Mode
	Gamma	Gamma1		Adjust to Gamma1
		Gamma2		Adjust to Gamma 2
		Gamma3		Adjust to Gamma 3
	DCR	Off		Disable dynamic contrast ratio
		On		Enable dynamic contrast ratio
	Overdrive	Weak		Adjust the response time (only for E2260PHU/E2260SHU/ E2460PWHU/E2460SWHU/E2460SHU/E2460PHU)
		Medium		
		Strong		
		Off		
	i-Care	On		adjusts the brightness according to light intensity (only for E2260PHU/E2260SHU/ E2460PWHU/E2460SWHU/E2460SHU/E2460PHU)
		Off		

Image Setup



1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (Image Setup), and press **MENU** to enter.

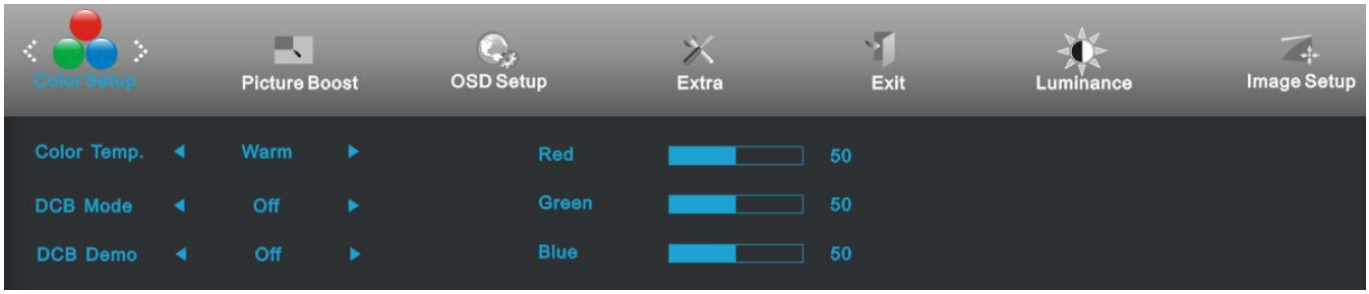
3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	Clock	0-100	Adjust picture Clock to reduce Vertical-Line noise.
	Phase	0-100	Adjust Picture Phase to reduce Horizontal-Line noise
	Sharpness	0-100	Adjust picture sharpness
	H.Position	0-100	Adjust the horizontal position of the picture.
	V.Position	0-100	Adjust the vertical position of the picture.

Color Setup



1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (Color Setup), and press **MENU** to enter.

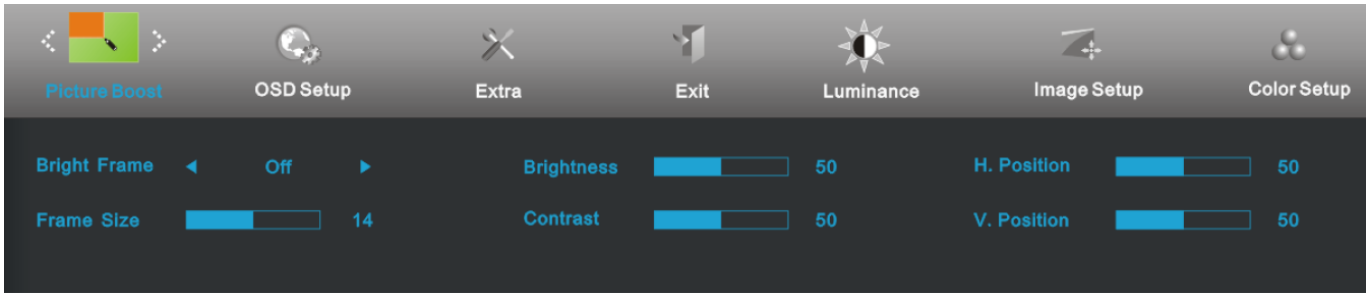
3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	Color setup.	Warm		Recall Warm Color Temperature from EEPROM.
		Normal		Recall Normal Color Temperature from EEPROM.
		Cool		Recall Cool Color Temperature from EEPROM.
		sRGB		Recall SRGB Color Temperature from EEPROM.
		User	Red	Red Gain from Digital-register
			Green	Green Gain Digital-register.
			Blue	Blue Gain from Digital-register
	DCB Mode	Full Enhance	on or off	Disable or Enable Full Enhance Mode
		Nature Skin	on or off	Disable or Enable Nature Skin Mode
		Green Field	on or off	Disable or Enable Green Field Mode
		Sky-blue	on or off	Disable or Enable Sky-blue Mode
		AutoDetect	on or off	Disable or Enable AutoDetect Mode
	DCB Demo		On or off	Disable or Enable Demo

Picture Boost



1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (Picture Boost), and press **MENU** to enter.

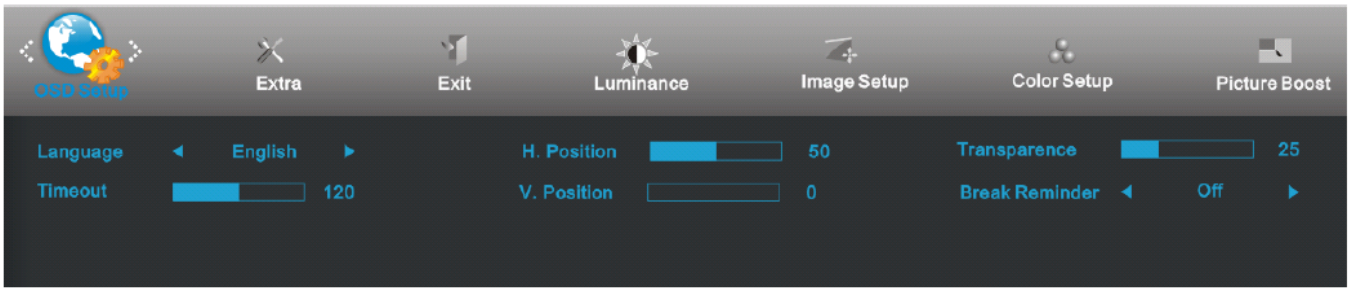
3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	Frame Size	14-100	Adjust Frame Size
	Brightness	0-100	Adjust Frame Brightness
	Contrast	0-100	Adjust Frame Contrast
	H. position	0-100	Adjust Frame horizontal Position
	V.position	0-100	Adjust Frame vertical Position
	Bright Frame	on or off	Disable or Enable Bright Frame

OSD Setup



1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (OSD Setup), and press **MENU** to enter.

3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	H.Position	0-100	Adjust the horizontal position of OSD
	V.Position	0-100	Adjust the vertical position of OSD
	Timeout	5-120	Adjust the OSD Timeout
	Transparence	0-100	Adjust the transparence of OSD
	Language		Select the OSD language

Extra

1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (Extra), and press **MENU** to enter.

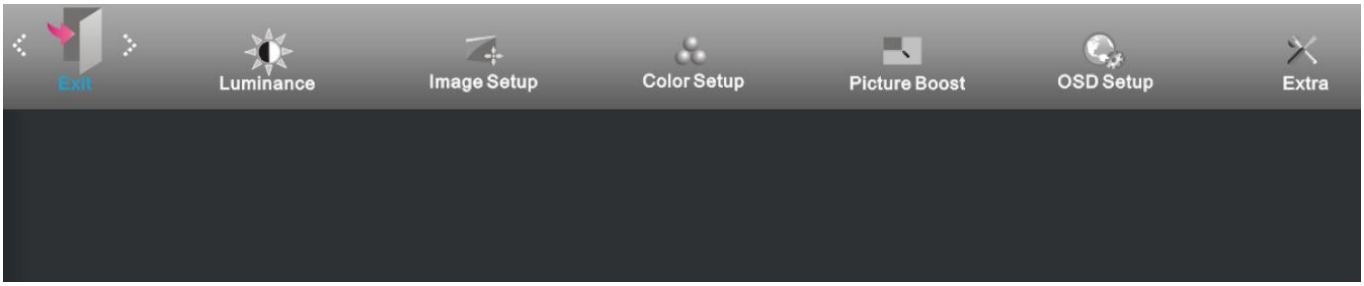
3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	Input Select	Auto / Analog / DVI / HDMI	Select input signal source. （E2260PHU/E2260SHU/ E2460PWHU/E2460SWHU/E2460SHU/E2460PHU）
	Input Select	Auto / Analog / DVI	Select input signal source. （E960SRDA/ E960PRDA E2060SWDA/E2060PWDA/ E2060SWD/ E2260SD/ E2260SDA/ E2260PDA）
	Input Select	Analog	Select input signal source.（E2060SW）
	Auto Config	yes or no	Auto adjust the picture to default.
	Off timer	0-24hrs	Select DC off time.
	Image Ratio	wide or 4:3	Select wide or 4:3 format for display.
	DDC-CI	yes or no	Turn ON/OFF DDC-CI Support.
	Reset	yes or no	Reset the menu to default.
	Information		Show the information of the main image and sub-image source.

Exit



1 Press **MENU** (Menu) to display menu.

2 Press < or > to select (Exit), and press **MENU** to enter.

3 Press < or > to select submenu, and press **MENU** to enter.

4 Press < or > to adjust.

5 Press **AUTO** to exit.

	Exit		Exit the main OSD

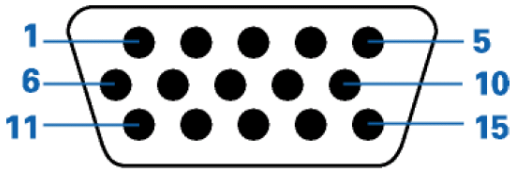
LED Indicator

Status	LED Color	
Full Power Mode	Green or Blue	
Active-off Mode	Orange or red	

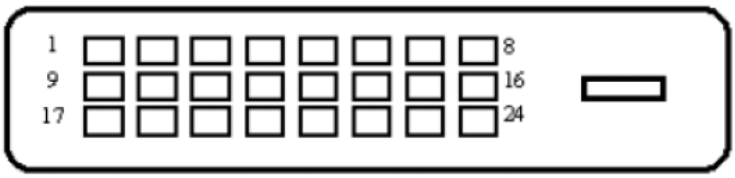
4. Input/Output Specification

4.1 Input Signal Connector

Pin Assignments



Pin Number	15-Pin Side of the Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
s	N.C.
5	Detect Cable
6	GND-R
7	GND-G
8	GND-B
9	+5V
10	Ground
11	N.C.
12	DDC-Serial data
13	H-sync
14	V-sync
15	DDC-Serial clock



Pin Number	24-Pin Color Display Signal Cable	Pin Number	24-Pin Color Display Signal Cable
1	TMDS data 2−	13	TMDS data 3+
2	TMDS data 2+	14	+5V Power
3	TMDS data 2/4 Shield	15	Ground (for+5V)
4	TMDS data 4−	16	Hot Plug Detect
5	TMDS data 4+	17	TMDS data 0−
6	DDC Clock	18	TMDS data 0+
7	DDC Data	19	TMDS data 0/5 Shield
8	N.C.	20	TMDS data 5−
9	TMDS data 1−	21	TMDS data 5+
10	TMDS data 1+	22	TMDS Clock Shield
11	TMDS data 1/3 Shield	23	TMDS Clock +
12	TMDS data 3−	24	TMDS Clock −

4.2 Factory Preset Display Modes

STANDARD	RESOLUTION	HORIZONTAL FREQUENCY(kHZ)	VERTICAL FREQUENCY(Hz)
VGA	640×480@60Hz	31.469	59.940
VGA	640×480@67Hz	35.000	66.667
VGA	640×480@72Hz	37.861	72.809
VGA	640×480@75Hz	37.500	75.000
Dos-mode	720×400@70Hz	31.469	70.087
SVGA	800×600@56Hz	35.156	56.250
SVGA	800×600@60Hz	37.879	60.317
SVGA	800×600@72Hz	48.077	72.188
SVGA	800×600@75Hz	46.875	75.000
SVGA	832×624@75Hz	49.725	74.551
XGA	1024×768@60Hz	48.363	60.004
XGA	1024×768@70Hz	56.476	70.069
XGA	1024×768@75Hz	60.023	75.029
SXGA	1280×1024@60Hz	63.981	60.020
SXGA	1280×1024@75Hz	79.976	75.025

4.3 Panel Specification

4.3.1 General Features

LM190E09-TLD1 is a Color Active Matrix Liquid Crystal Display with a Light Emitting Diode (LED) backlight system. The matrix employs a-Si Thin Film Transistor as the active element. It is a transmissive type display operating in the normally white mode. It has a 19.0 inch diagonally measured active display area with SXGA resolution (1024 vertical by 1280 horizontal pixel array) Each pixel is divided into Red, Green and Blue sub-pixels or dots which are arranged in vertical stripes. Gray scale or the brightness of the sub-pixel color is determined with a 8-bit gray scale signal for each dot, thus, presenting a palette of more than 16,7M colorswith Advanced-FRC(Frame Rate Control). It has been designed to apply the interface method that enables low power, high speed, low EMI. FPD Link or compatible must be used as a LVDS(Low Voltage Differential Signaling) chip. It is intended to support applications where thin thickness, wide viewing angle, low power are critical factors and graphic displays are important.

4.3.2 Display Characteristics

Active screen size	19.0 inches (481.9mm) diagonal
Outline Dimension	396.0(H) x 324.0(V) x 9.9(D) mm(Typ.)
Pixel Pitch	0.098*RGB(H)mm x 0.294(V)mm
Pixel Format	1280 horizontal By 1024 vertical Pixels. RGB stripe arrangement
Interface	LVDS 2Port
Color depth	16.7M colors
Luminance, white	250 cd/m^2 (Center 1Point, typ)
Viewing Angle (CR>10)	R/L 170(Typ.), U/D 160(Typ.)
Power Consumption	Target total 9.95W(Typ.), (4.65W@VLCD , 5.3W_w/o driver)
Weight	1620g(typ.)
Display operating mode	Transmissive mode, normally White
Surface treatments	Hard coating (3H), Anti-glare treatment of the front polarizer

4.3.3 Electrical Characteristics

TFT LCD MODULE

VLCD=5.0V, 25 ± 2.ºC,fV=60Hz，VLCD=5.0V

Parameter	Symbol	Values			Unit
		Min	Typ	Max	
MODULE :					
Power Supply Input Voltage	V_{LCD}	4.5	5.0	5.5	Vdc
Permissive Input Voltage Ripple	V_{RF}	-	-	0.2	mV
Power Supply Input Current	$I_{LCD-MOSAIC}$	-	931	1163	mA
	$I_{LCD-BLACK}$	-	1089	1361	mA
Power Consumption	P_{LCD}	-	4.65	5.81	Watt
Inrush current	I_{RUSH}	-	-	3.0	A

Back Light Unit

Ta = 25 ± 2.ºC

Parameter	Symbol	Condition	Values			Unit
			Min.	Typ.	Max.	
LED String Current	Is		-	60	65	mA
LED String Voltage	Vs		41.3	44.3	47.3	V
Power Consumption	PBar		5.0	5.3	5.7	Watt
LED Life Time	LED_LT		30,000	-	-	Hrs

4.3.4 Optical Characteristics

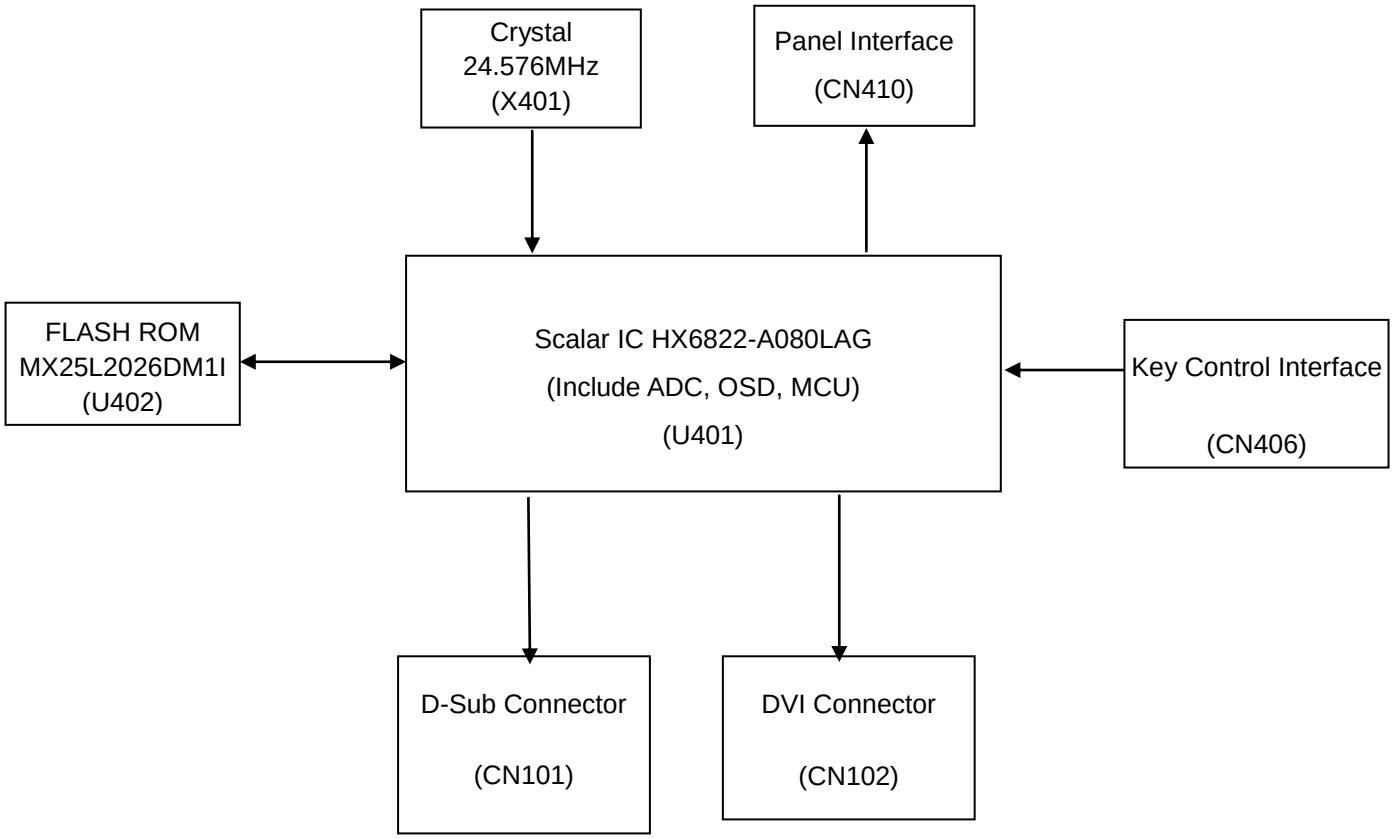
Ta= 25°C, VLCD=5.0V, fV=60Hz fCLK=54.0MHz, IBL=60mA

Parameter		Symbol	Values			Units
			Min	Typ	Max	
Contrast Ratio		CR	700	1000	-	
Surface Luminance, white		L_{WH}	200	250	-	cd/m²
Surface Luminance, Black		L_{BL}	-	-	0.6	cd/m²
Luminance Variation		δ_{WHITE} 9P	75	-	-	%
Response Time	Rise Time	Tr_R	-	1.3	2.6	ms
	Decay Time	Tr_D	-	3.7	7.4	ms
Color Gamut				72	-	%
Color Coordinates [CIE1931]	RED	Rx	Typ -0.03	0.646	Typ +0.03	
		Ry		0.335		
	GREEN	Gx		0.306		
		Gy		0.631		
	BLUE	Bx		0.152		
		By		0.059		
	WHITE	Wx		0.313		
		Wy		0.329		
Viewing Angle (CR>5)						
	x axis, right(ϕ=0°)	θr	75	88		Degree
	x axis, left (ϕ=180°)	θl	75	88		
	y axis, up (ϕ=90°)	θu	70	85		
	y axis, down (ϕ=270°)	θd	70	85		
Viewing Angle (CR>10)						
	x axis, right(ϕ=0°)	θr	70	85		Degree
	x axis, left (ϕ=180°)	θl	70	85		
	y axis, up (ϕ=90°)	θu	60	75		
	y axis, down (ϕ=270°)	θd	70	85		
Crosstalk					1.5	%
Gamma			1.9	2.2	2.5	
Color uniformity angular dependence (TCO 5.0)			-	-	0.025	
Luminance uniformity - Angular dependence (TCO 5.0)		LR	-	-	1.73	
Color grayscale linearity		Δu'v'		0.018		

5. Block Diagram

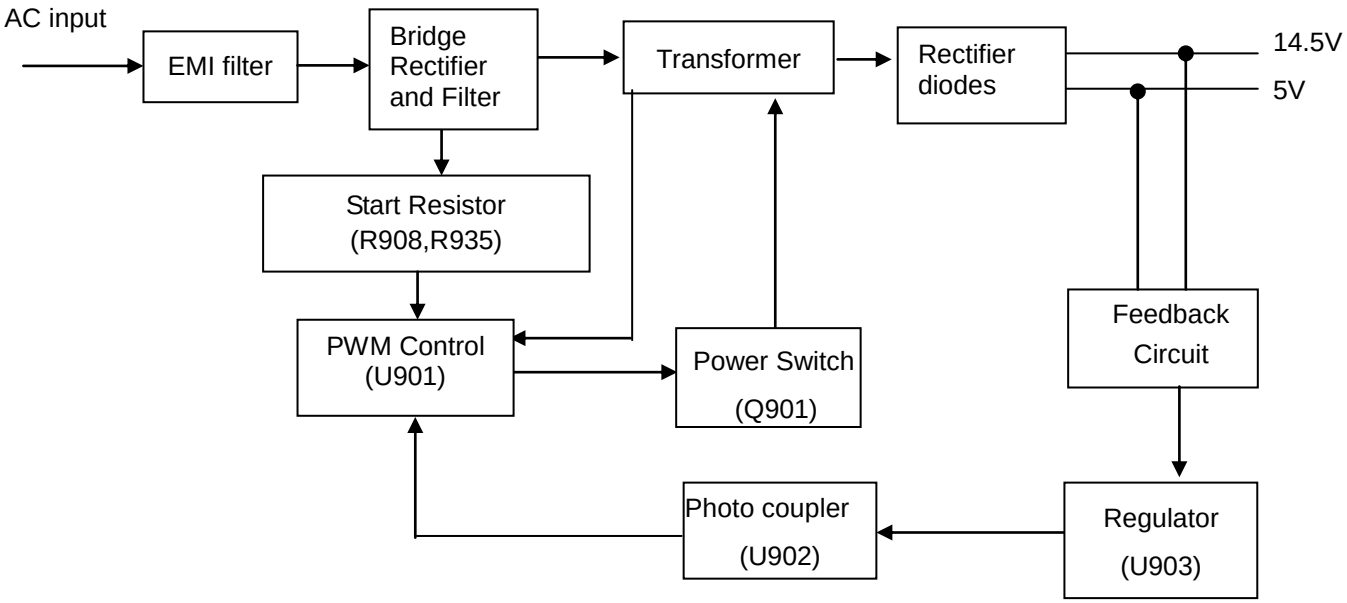
5.1 Main Board

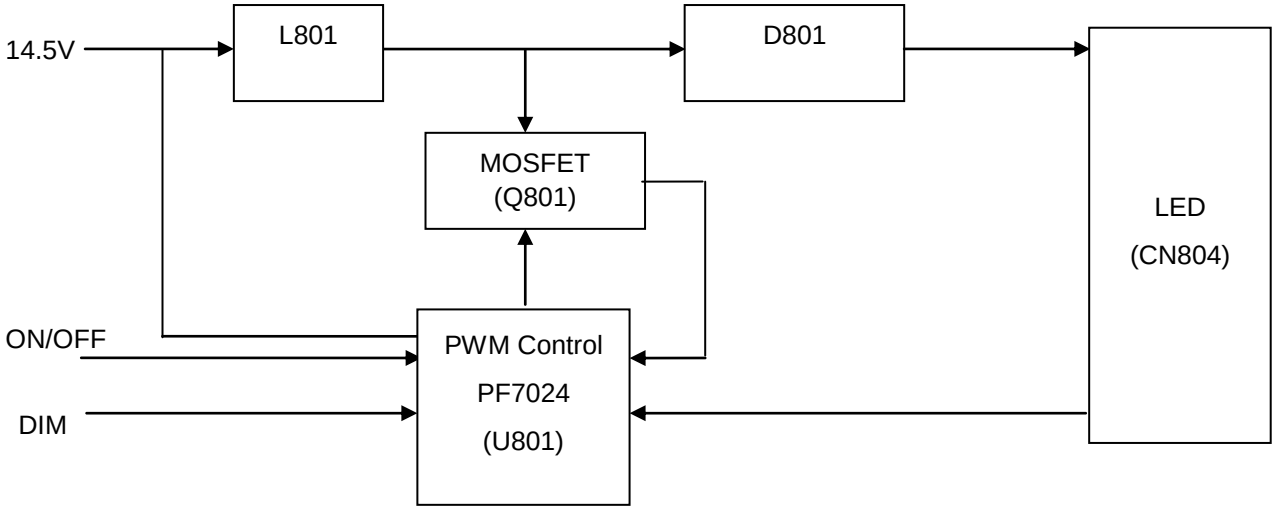
715G5306M02000004C



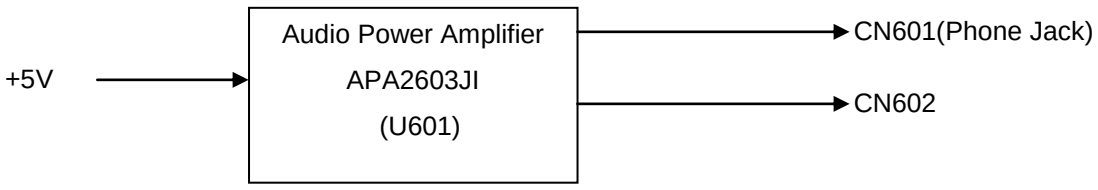
5.2 Power Board

715G4497P05000001C





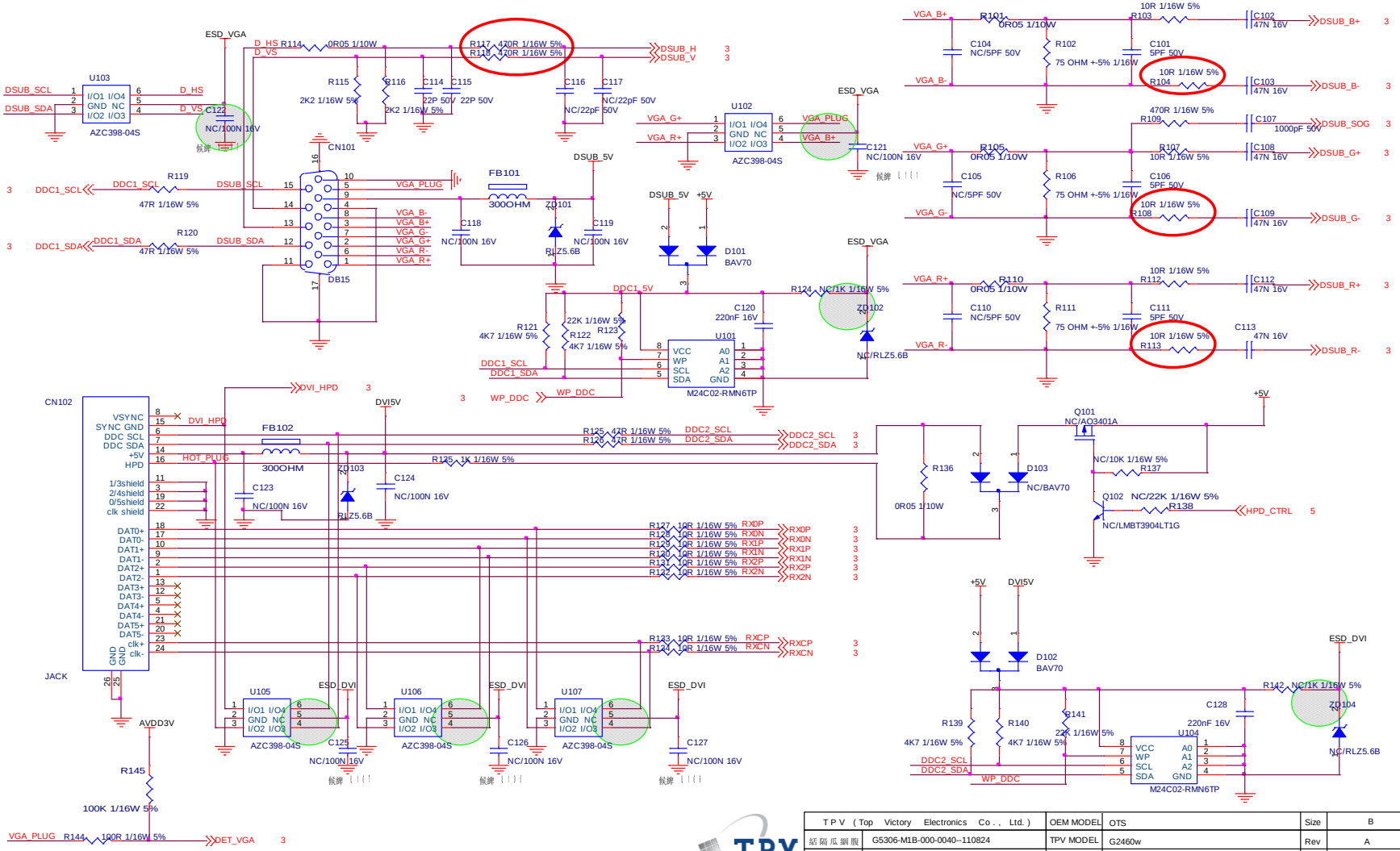
Audio



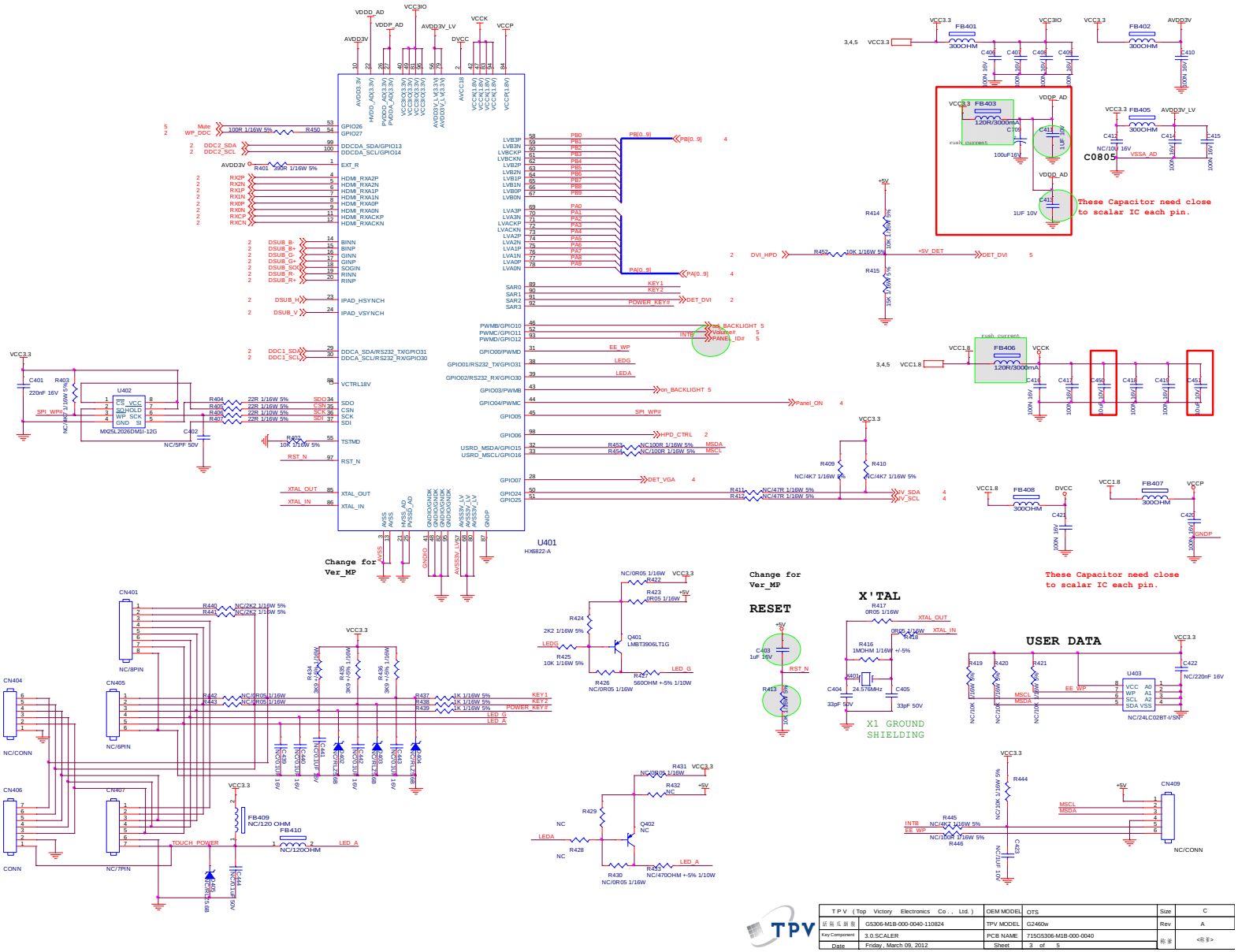
6. Schematic

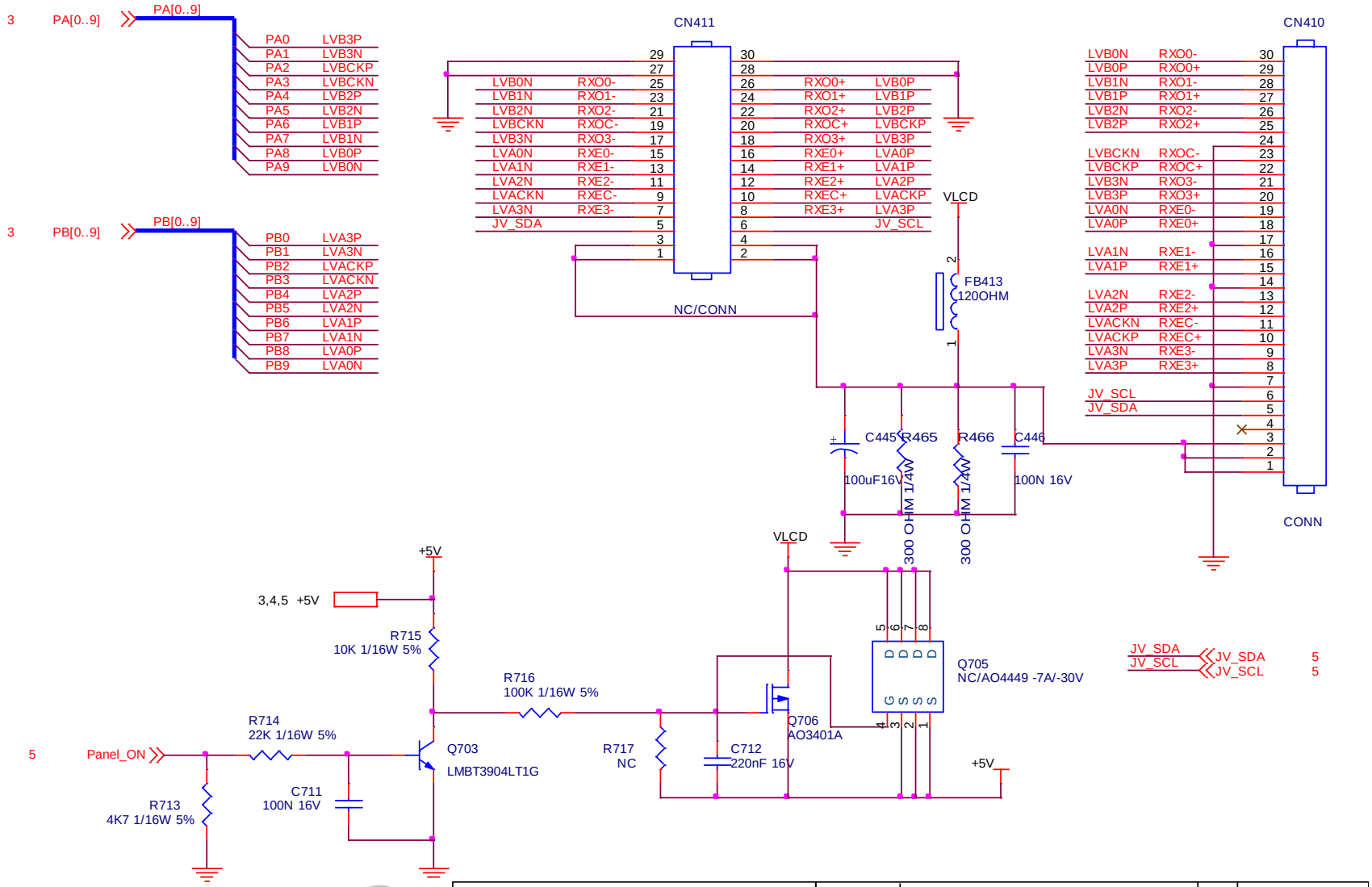
6.1 Main Board

715G5306M02000004C

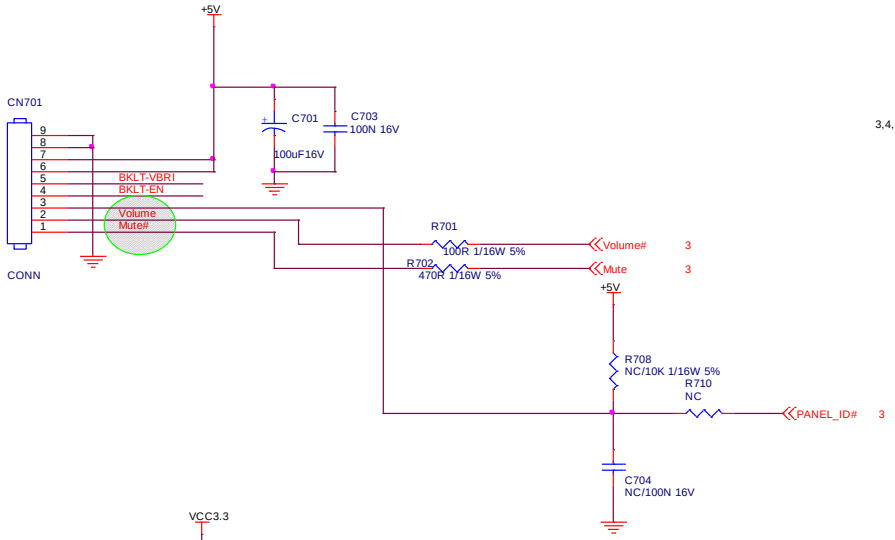


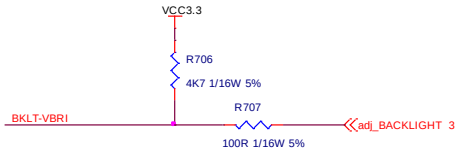
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	OTS	Size	B
結隔瓜鋼股	G5306-M1B-000-0040--110824	TPV MODEL	G2460w	Rev	A
Key Component	2.0.INPUT	PCB NAME	715G5306-M1B-000-0040	称爹	<称爹>
Date	Wednesday, March 07, 2012	Sheet	3 of 5		

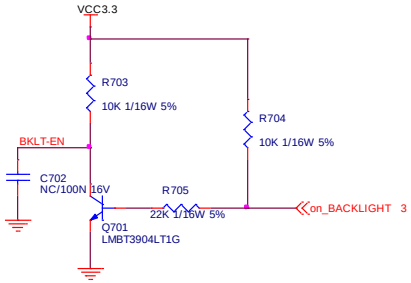

U401
HX6822-A
Change for Ver_MP
These Capacitor need close to scalar IC each pin.
RESET
X'TAL
X1 GROUND SHIELDING
USER DATA
C0805
TPV
T P V (Top Victory Electronics Co . , Ltd.)
OEM MODEL
OTS
G5306-M1B-000-0040-110824
TPV MODEL
G2460w
3.0.SCALER
PCB NAME
715G5306-M1B-000-0040
Friday , March 09, 2012
Sheet
3 of 5

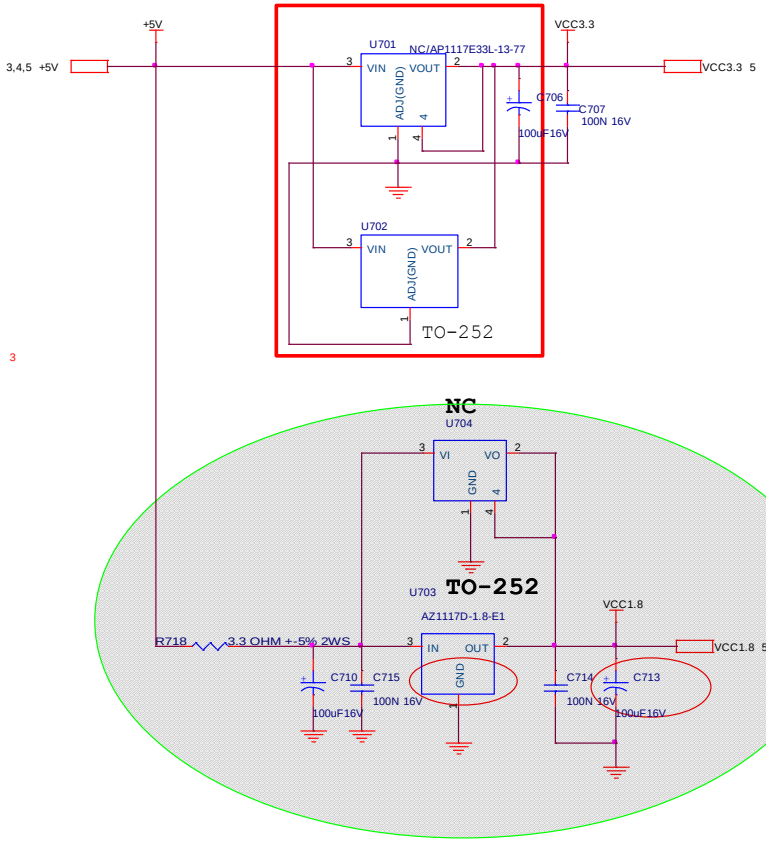


T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	OTS	Size	A
結 隔 瓜 綑 腹	G5306-M1B-000-0040-110824	TPV MODEL	G2460w	Rev	A
Key Component	3.0.OUTPUT	PCB NAME	715G5306-M1B-000-0040	称 爹	<称爹>
Date	Tuesday , March 06, 2012	Sheet	4 of 5		



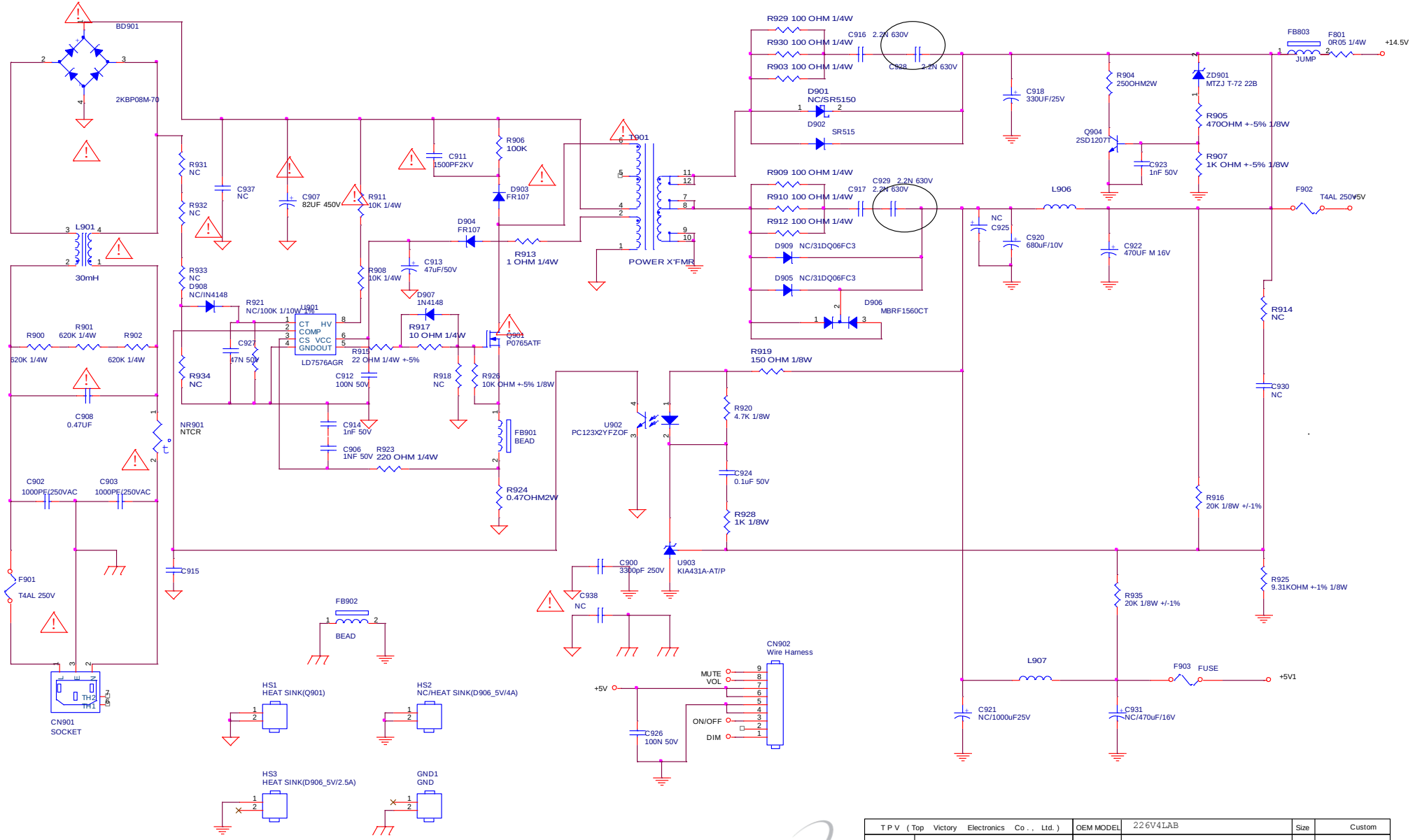




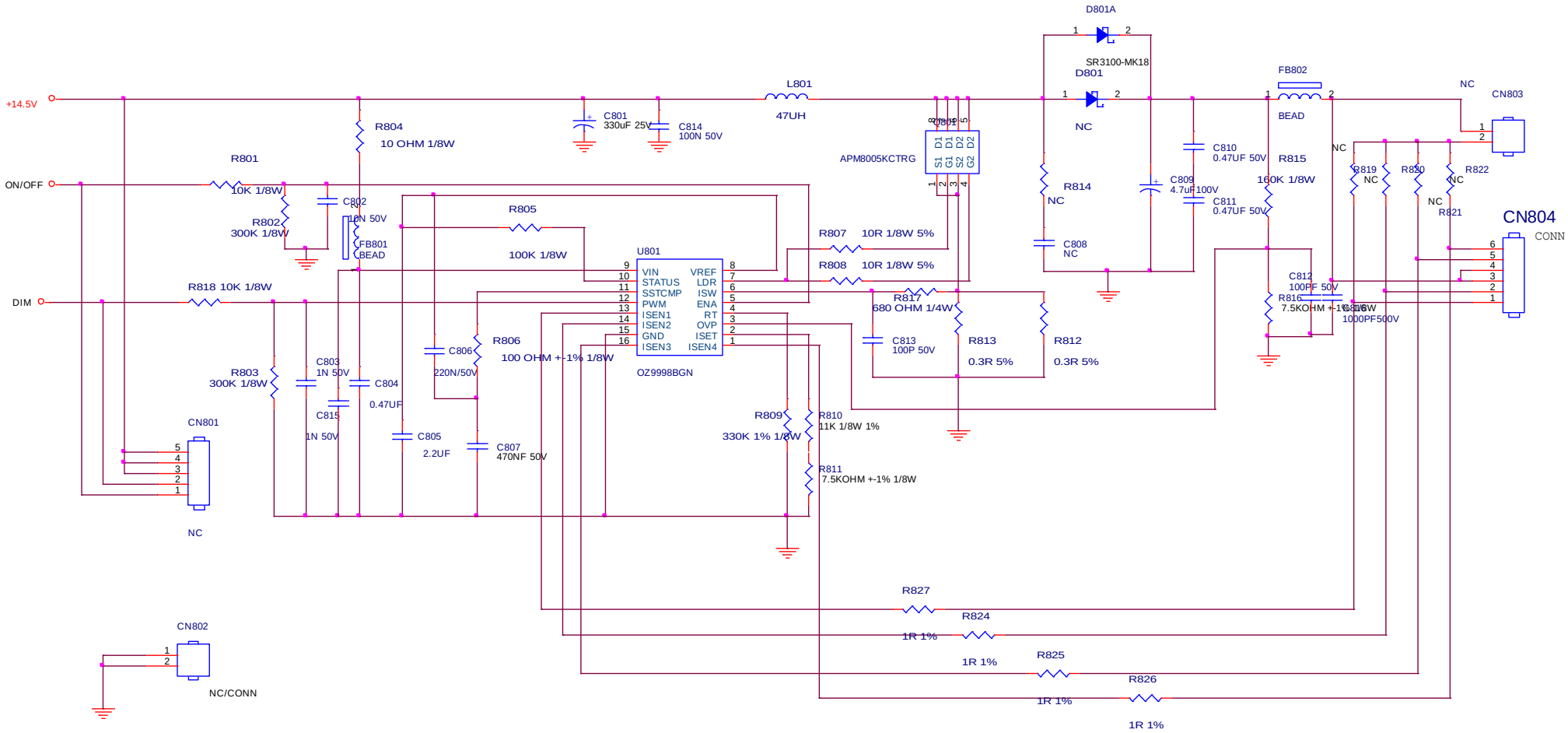


TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	OTS	Size	B
延陽瓜鋼腹	G5306-M1B-000-0040-110824	TPV MODEL	G2460w	Rev	A
Key Component	4.0.POWER	PCB NAME	715G5306-M1B-000-0040	称爹	<称爹>
Date	Tuesday, March 06, 2012	Sheet	5 of 5		

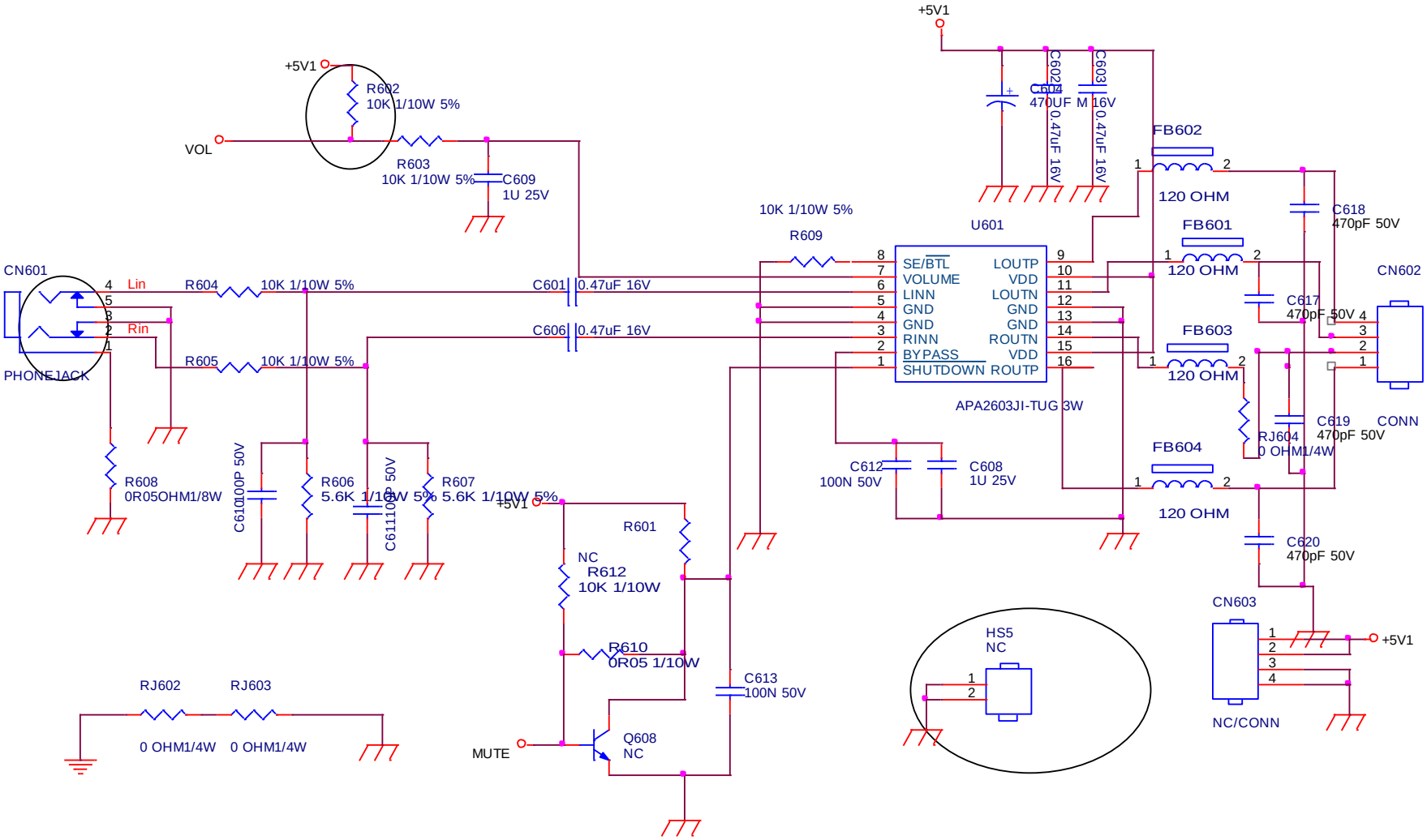
6.2 Power Board
715G4497P05000001C



TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	226V4LAB	Size	Custom
結隔瓜組服	G4497-P03-000-0010-15-120409	TPV MODEL	PLPCCB341MHC2	Rev	1
Key Component	01.POWER	PCB NAME	715G4497-P03-000-0010	称爹	ODM MODEL
Date	Tuesday, May 29, 2012	Sheet	1 of 3		



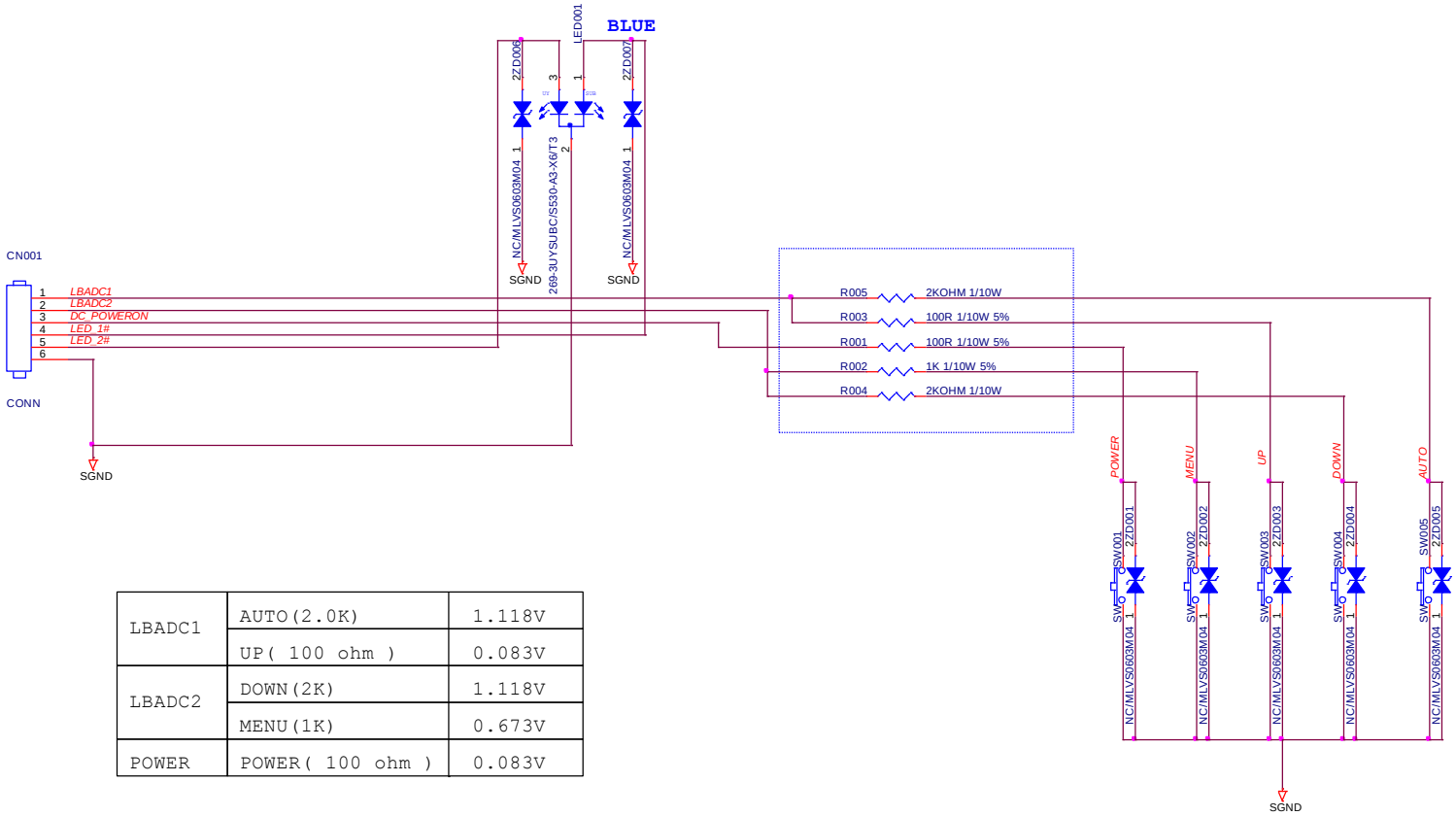
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	226V4LAB	Size	Custom
結構代號	G4497-P03-000-0010-15-120409	TPV MODEL	PLPCCB341MHC2	Rev	1
Key Component	02.CONVERTER	PCB NAME	715G4497-P03-000-0010	料號	ODM MODEL
Date	Tuesday, May 29, 2012	Sheet	2 of 3		



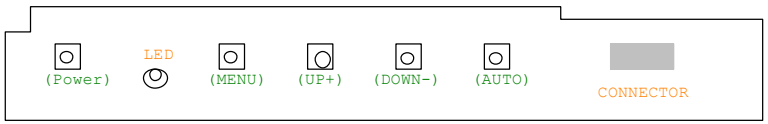
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	226V4LAB	Size	A
結構代號	G4497-P03-000-0010-15-120409	TPV MODEL	PLPCCB341MHC2	Rev	1
Key Component	03.AUDIO	PCB NAME	715G4497-P03-000-0010	称爹	ODM MODEL
Date	Monday, April 09, 2012	Sheet	2 of 3		

6.3 Key Board

715G5357K03000001M



LBADC1	AUTO(2.0K)	1.118V
	UP(100 ohm)	0.083V
LBADC2	DOWN(2K)	1.118V
	MENU(1K)	0.673V
POWER	POWER(100 ohm)	0.083V

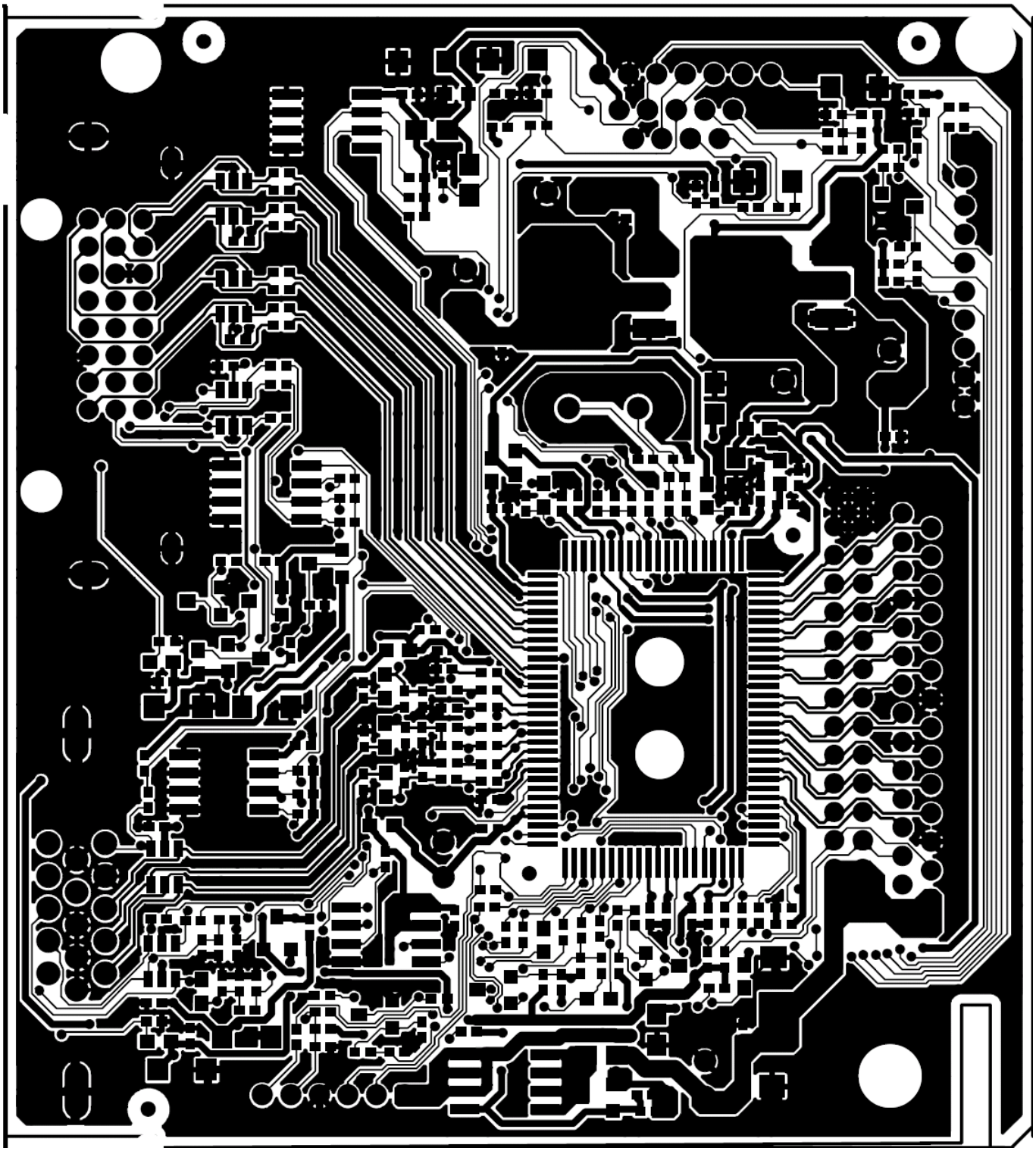


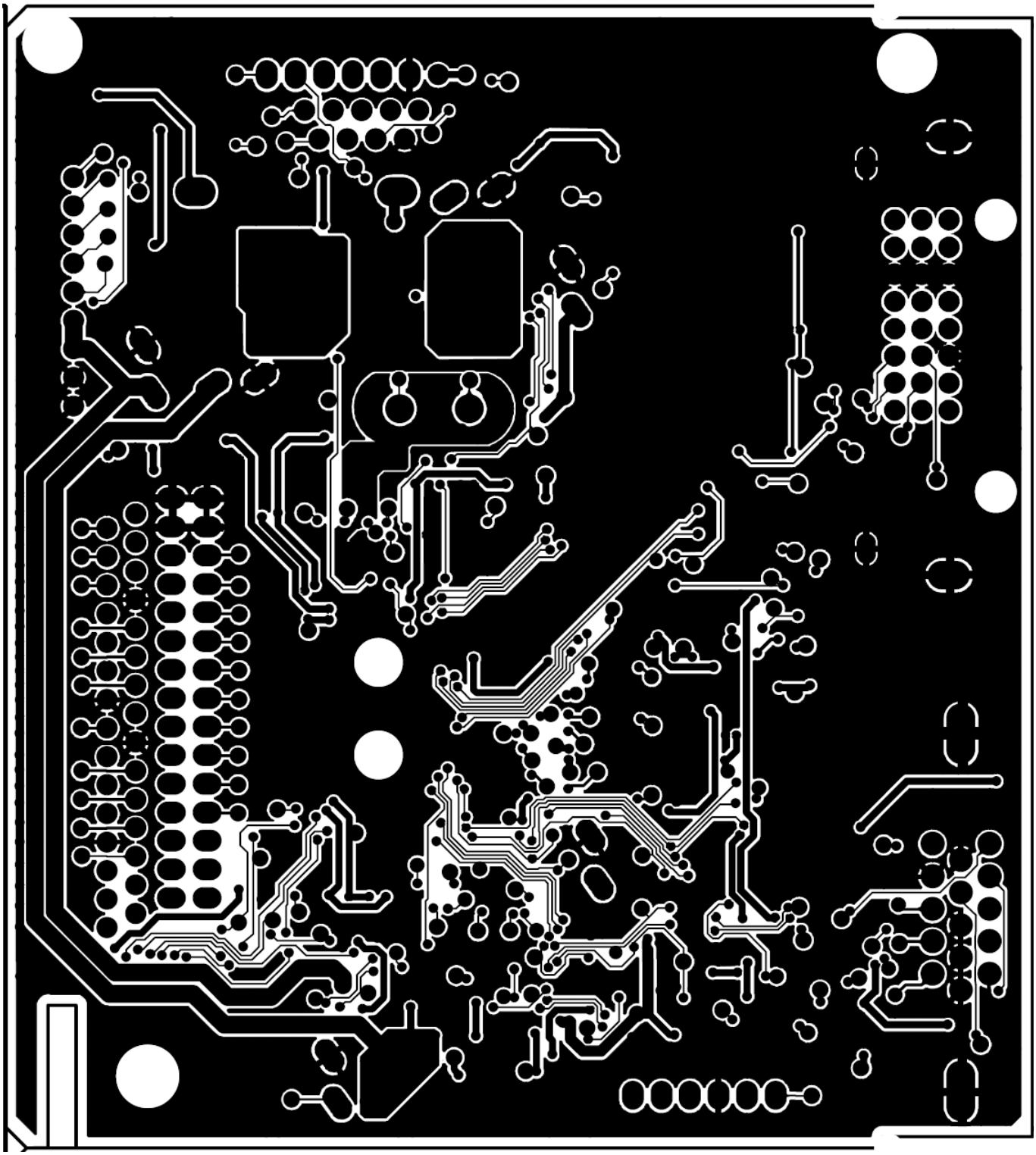
T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	AOC	Size	B
結隔瓜鋼腹	G5357-K0D-000-0010	TPV MODEL	e2460Swg	Rev	D
Key Component	2.0.key	PCB NAME	715G5357-K0D-000-0010	称爹	<称爹>
Date	Tuesday , January 17, 2012	Sheet	1 of 2		

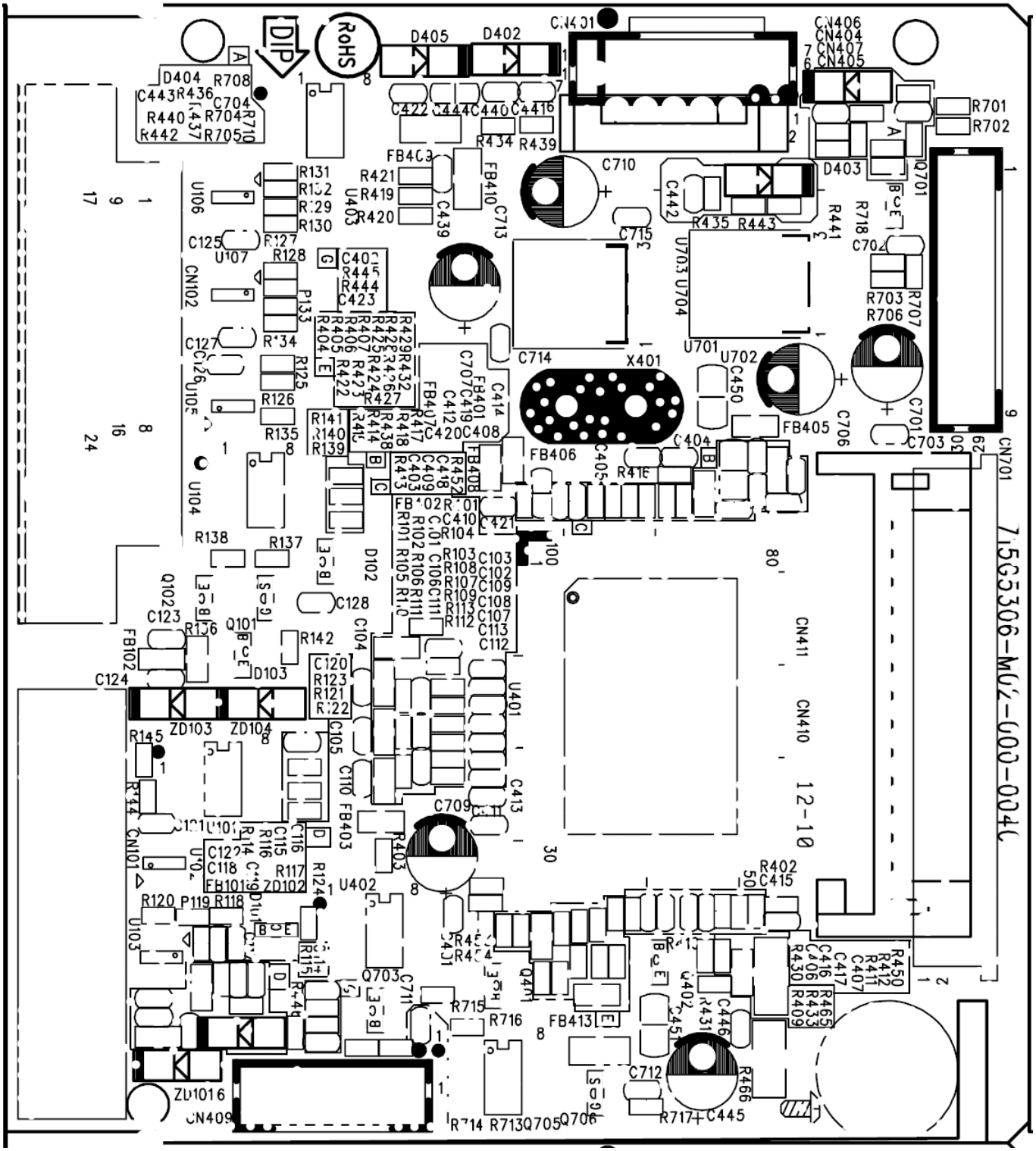
7. PCB Layout

7.1 Main Board

715G5306M02000004C

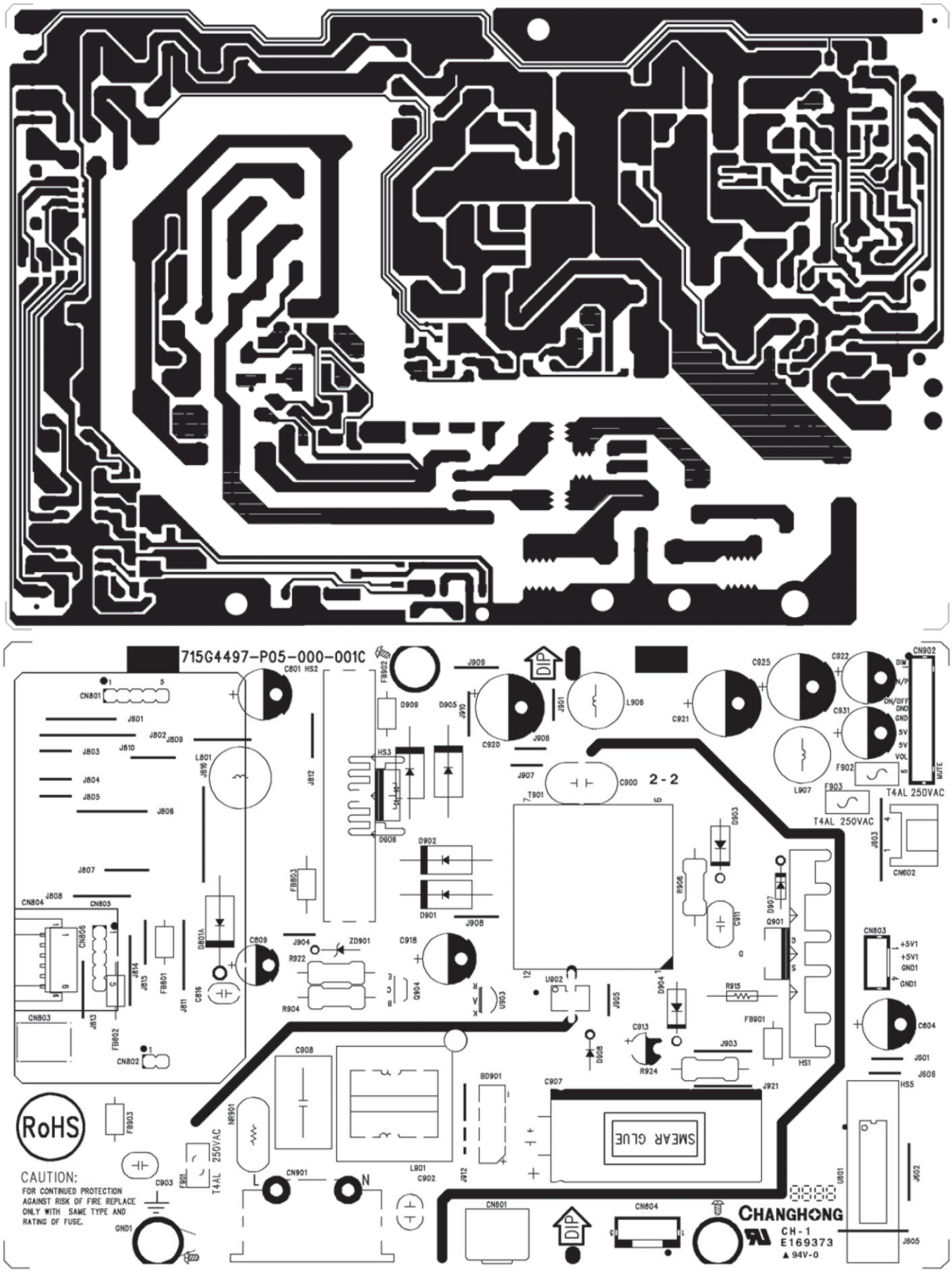


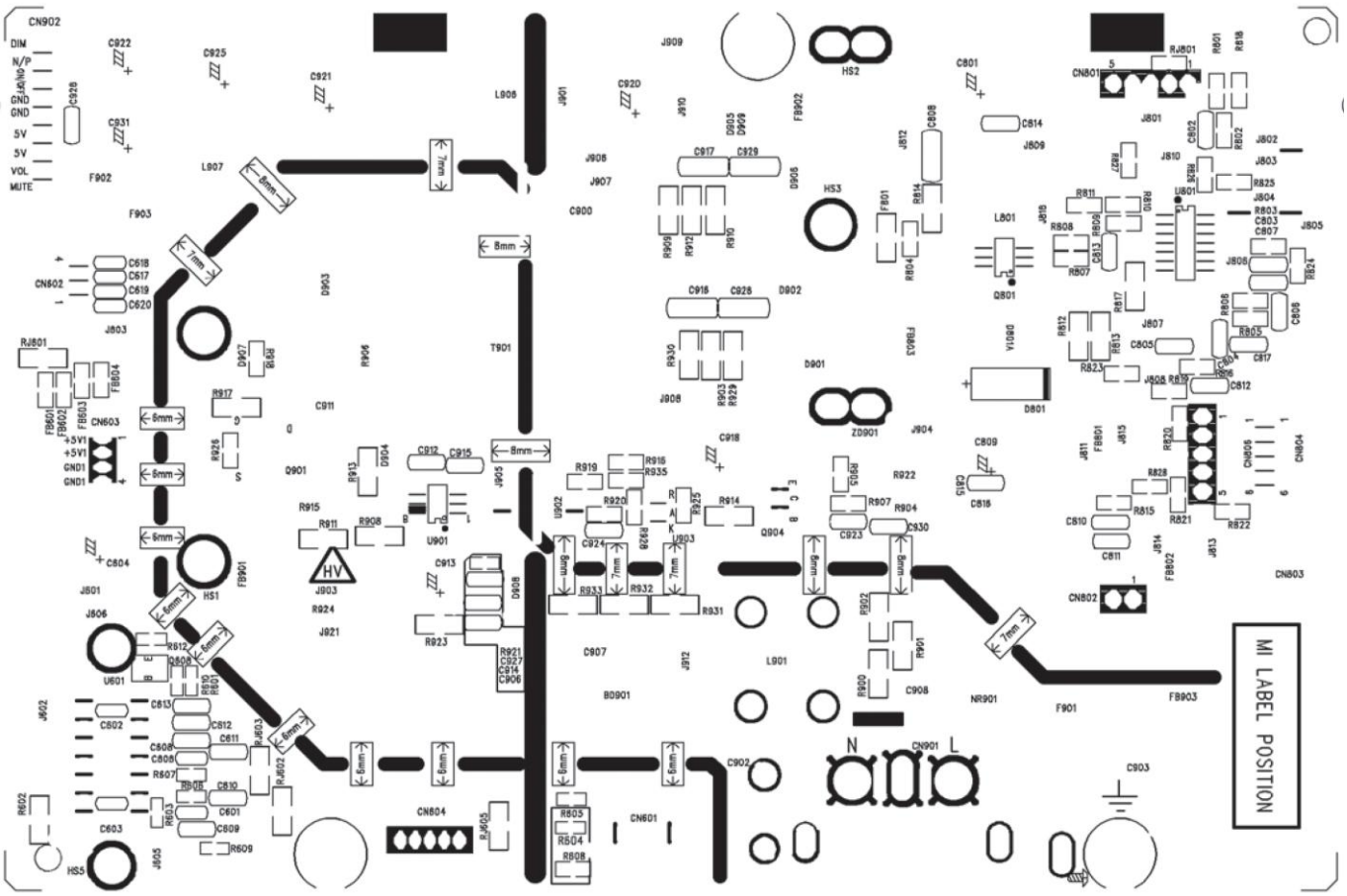



DIP
RoHS
715G5306-M02-000-004C
CN401
CN406
CN404
CN407
CN405
D405
D402
D404
R708
C704
R710
C443
R436
R437
R440
R704
R442
R705
C422
C444
C440
C416
R434
R439
R701
R702
D403
Q701
FB403
FB410
C710
C713
C715
C442
R435
R443
R441
R718
C704
U106
U107
U403
R131
R132
R129
R130
R421
R419
R420
C439
C125
R127
R128
CN102
R133
R134
C423
R429
R432
R425
R426
R427
R422
R423
R424
R407
R406
R405
R404
R403
C414
C707
C419
FB401
C412
C420
C408
C714
X401
U703
U704
U701
U702
C450
C706
R703
R706
R707
C701
C703
CN701
FB405
FB406
C404
R416
C405
R452
FB408
C403
C409
C418
R453
FB402
R101
R102
R106
R111
C410
C421
R104
R103
R108
R107
R109
R113
R112
C103
C102
C109
C108
C107
C113
C112
C111
C106
C104
C105
C110
FB403
C128
D102
R138
R137
R135
R140
R139
R141
U104
U105
C127
C126
R125
R126
Q102
Q101
C123
R136
R142
C120
R123
R121
R122
D103
C124
FB102
ZD103
ZD104
R145
R144
CN101
U101
C115
R116
C116
C122
C118
C119
R117
R124
ZD102
FB101
R120
P119
R118
U103
U402
R403
C709
C413
U401
CN411
CN410
12-10
R402
C415
R450
R412
R411
C407
C416
C406
R430
R465
R433
R409
C417
C446
C445
R431
Q402
Q703
C711
R715
R716
FB413
C712
R466
R717
R714
R713
Q705
Q706
ZD1016
CN409

7.2 Power Board

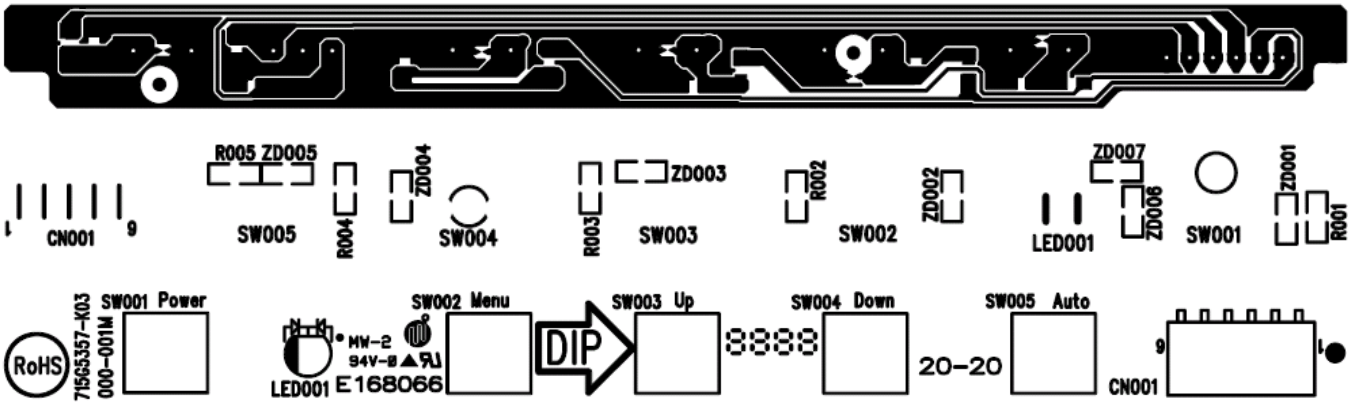
715G4497P05000001C




CN902
DIM
N/P
GND
GND
5V
5V
VOL
MUTE
CN802
RJ801
CN603
+5V1
+5V1
GND1
GND1
J803
J501
J506
J602
J603
J605
J901
J903
J921
J907
J908
J909
J910
J912
J904
J905
J801
J802
J804
J805
J806
J807
J808
J809
J810
J811
J812
J813
J814
J815
CN804
CN601
CN901
N
L
CN803
CN801
HV
HS1
HS2
HS3
HS5
T901
L907
L908
L901
L801
Q801
Q901
Q904
D801
D901
D902
ZD901
U901
U601
U801
V1080
F902
F903
F901
FB903
NR901
B0901
8mm
7mm
6mm
5mm
MI LABEL POSITION

7.3 Key Board

715G5357K03000001M



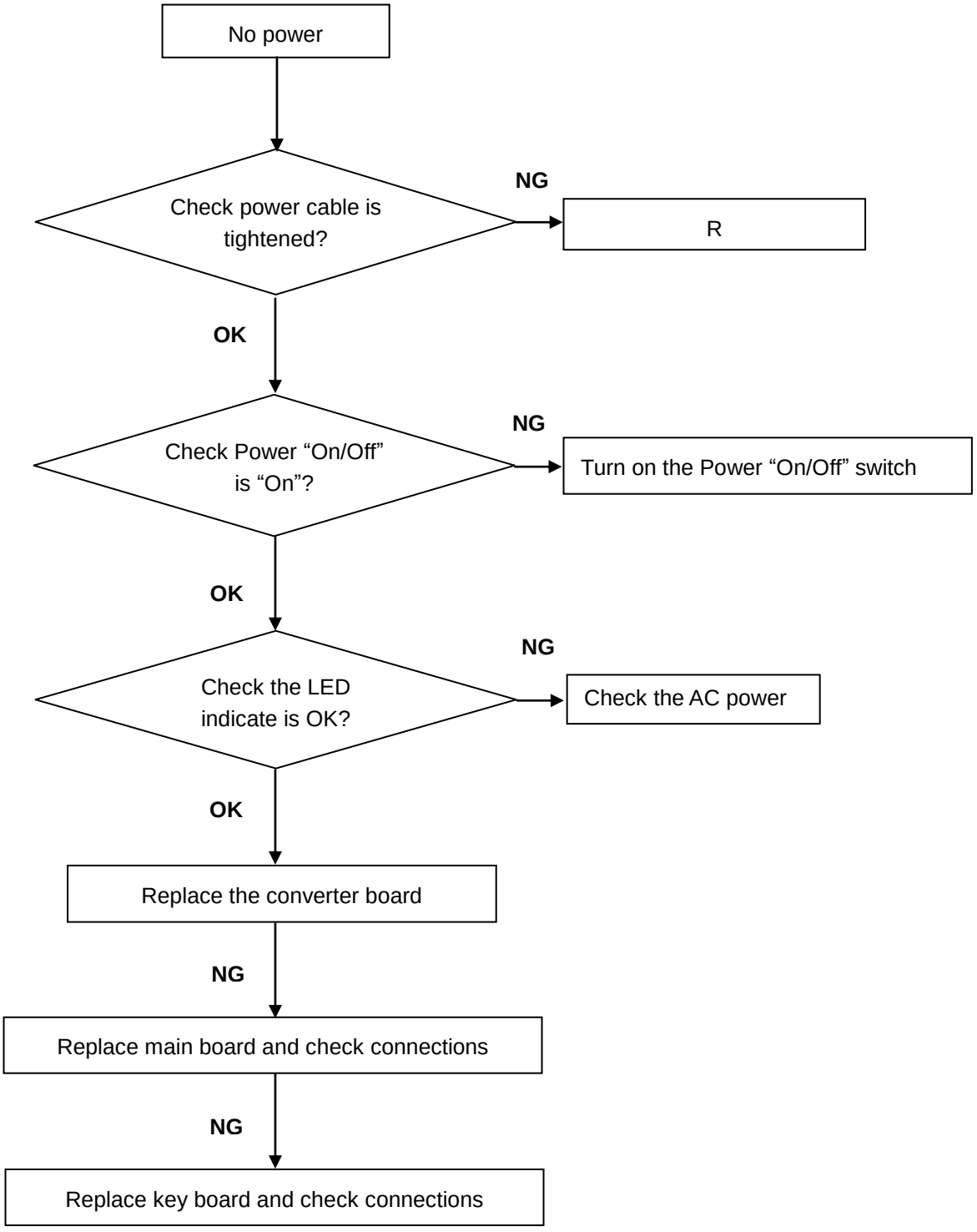
8. Maintainability

8.1 Equipments and Tools Requirement

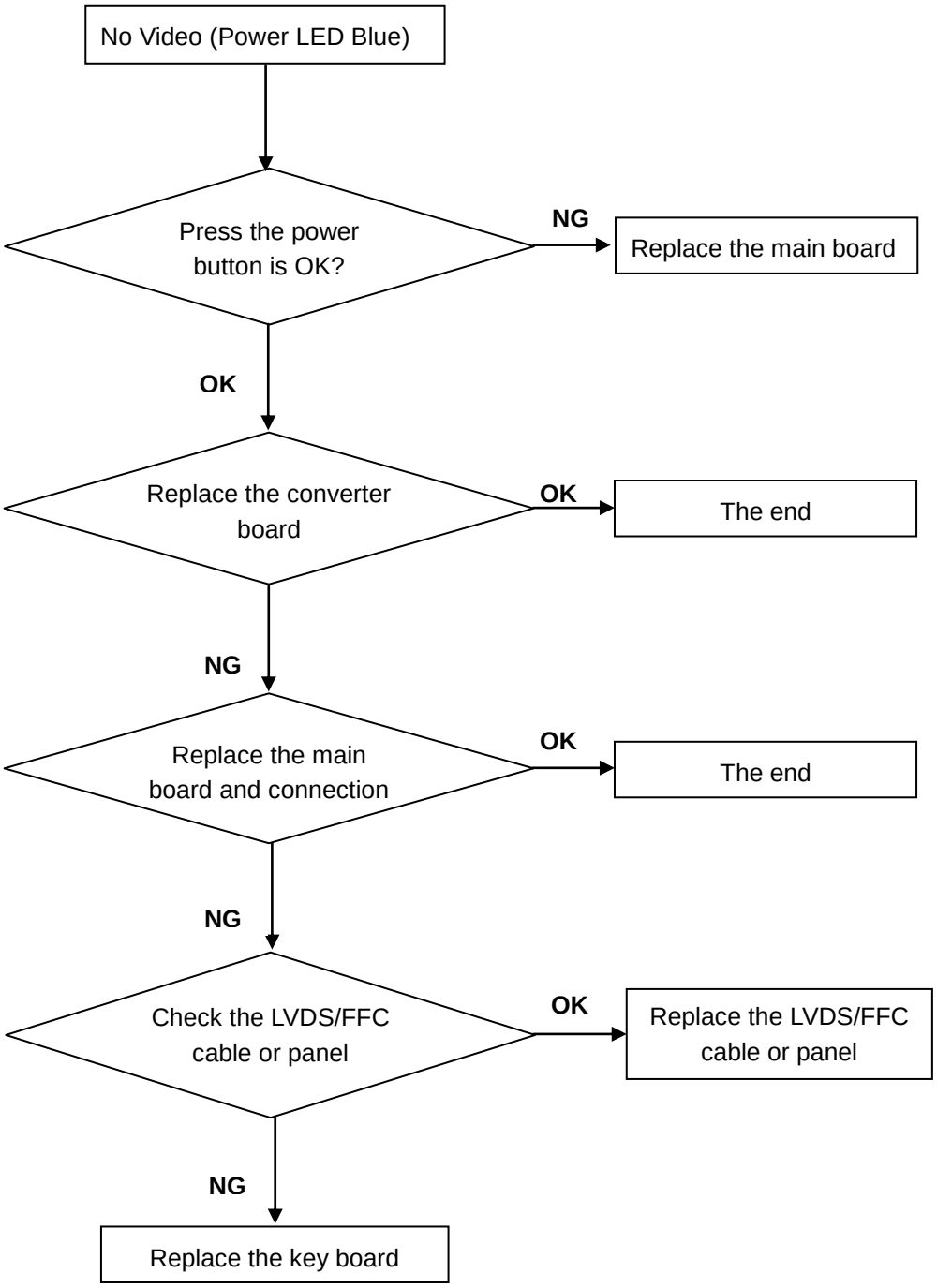
1. Voltmeter.
2. Oscilloscope.
3. Pattern Generator.
4. DDC Tool with an IBM Compatible Computer.
5. Alignment Tool.
6. LCD Color Analyzer.
7. Service Manual.
8. User Manual.

8.2 Trouble Shooting

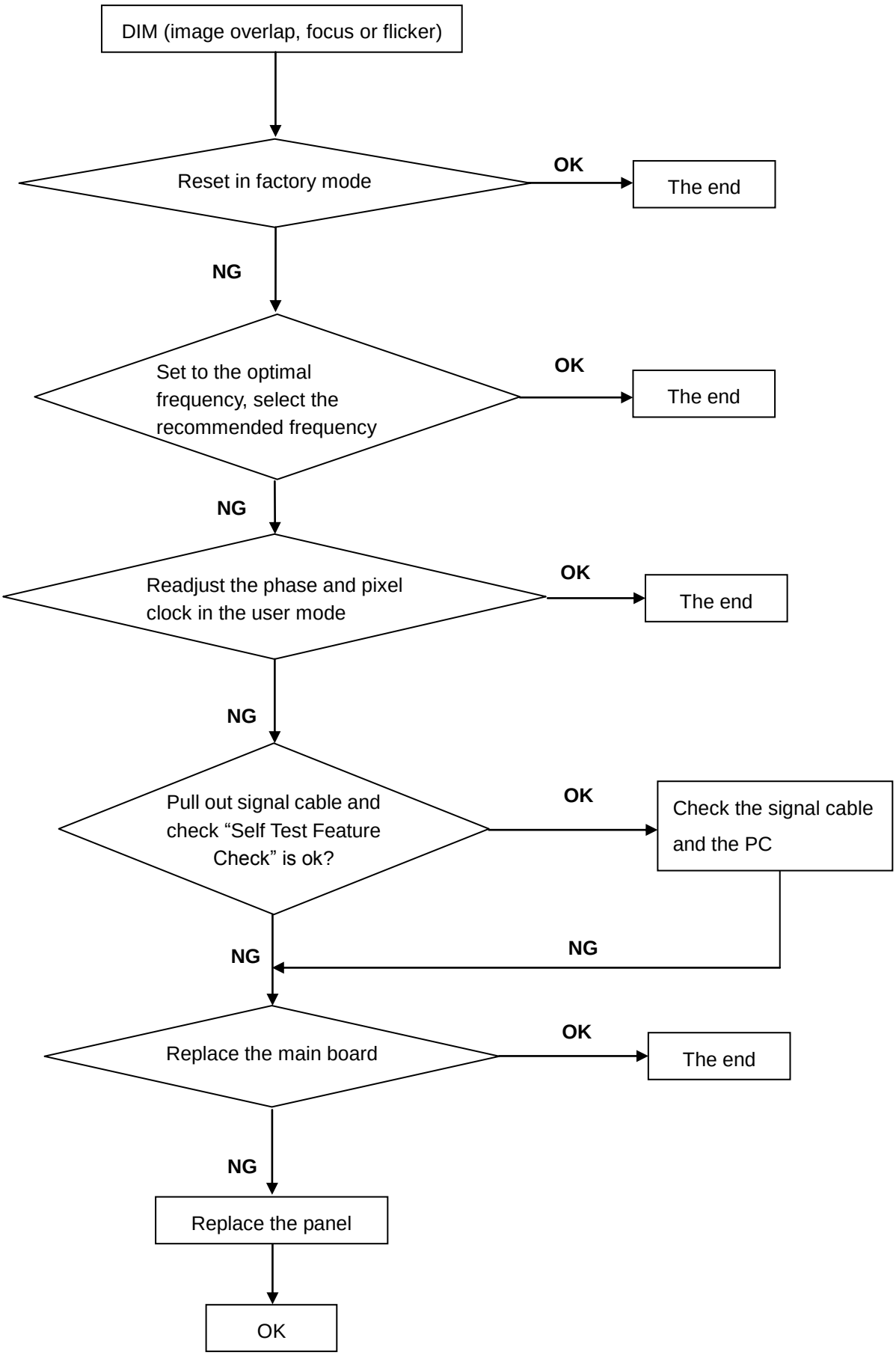
1. No Power



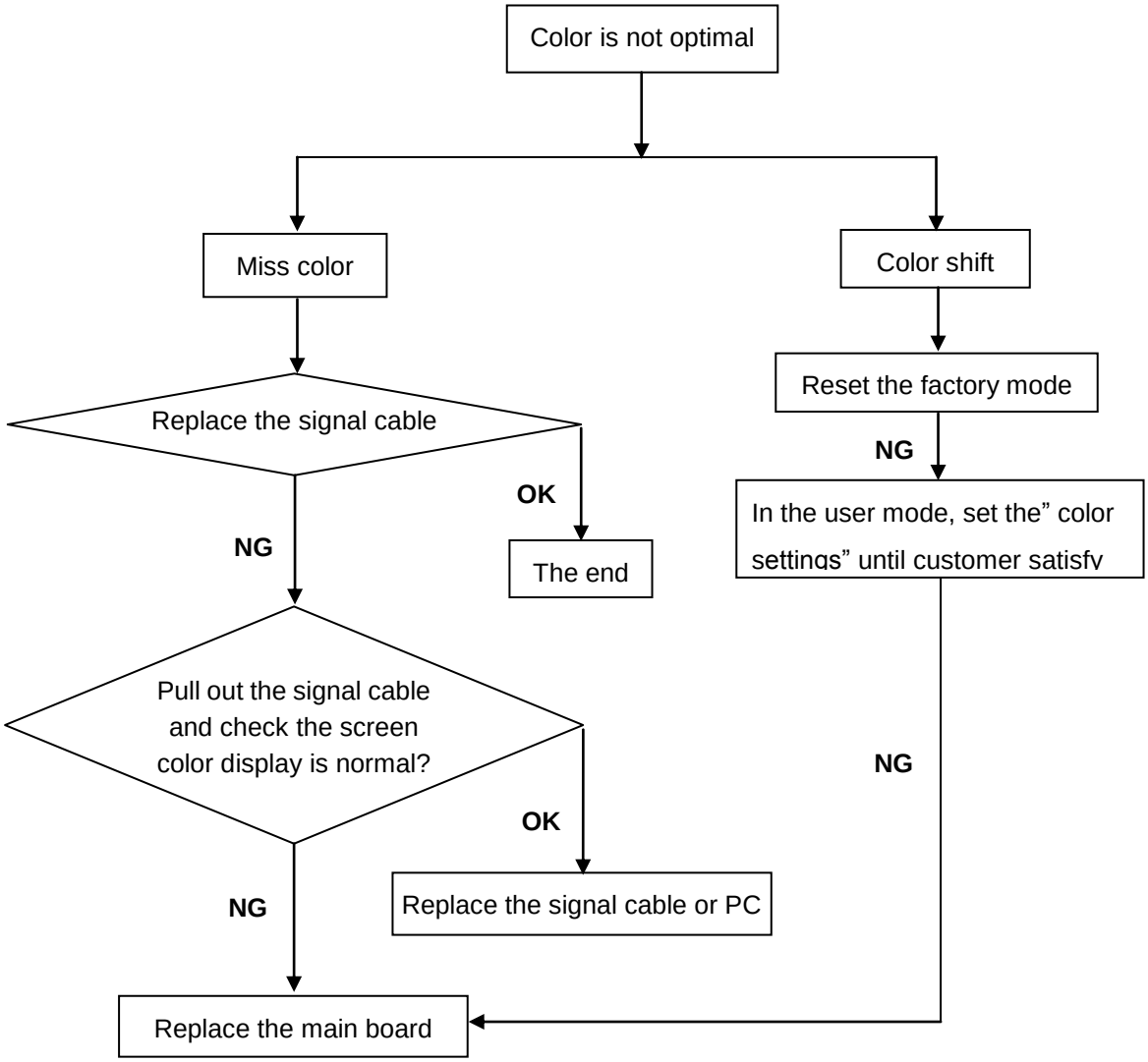
2. No Video (Power LED Blue)



3. DIM


DIM (image overlap, focus or flicker)
Reset in factory mode
OK
The end
NG
Set to the optimal frequency, select the recommended frequency
OK
The end
NG
Readjust the phase and pixel clock in the user mode
OK
The end
NG
Pull out signal cable and check “Self Test Feature Check” is ok?
OK
Check the signal cable and the PC
NG
NG
Replace the main board
OK
The end
NG
Replace the panel
OK

4. Color is not optimal



9. White- Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.

How to setting MEM channel you can reference to chroma 7120 user guide or simpl use “SC” key and “NEXT” Key to modify xyY value and use “ID” key to modify the TEXT description Following is the procedure to do white-balance adjust .

2. Setting the color temp. you want

A. MEM.CHANNEL 3 Warm (6500K):

Warm color temp. parameter is x = 313 ±20, y = 329 ±20

B. MEM.CHANNEL 4 Normal (7300K):

Normal color temp. parameter is x = 301 ±20, y = 317 ±20

C. MEM.CHANNEL 9 Cool (9300K):

Cool color temp. parameter is x = 283 ±20, y = 297 ±20

D. MEM.CHANNEL 10 (sRGB color):

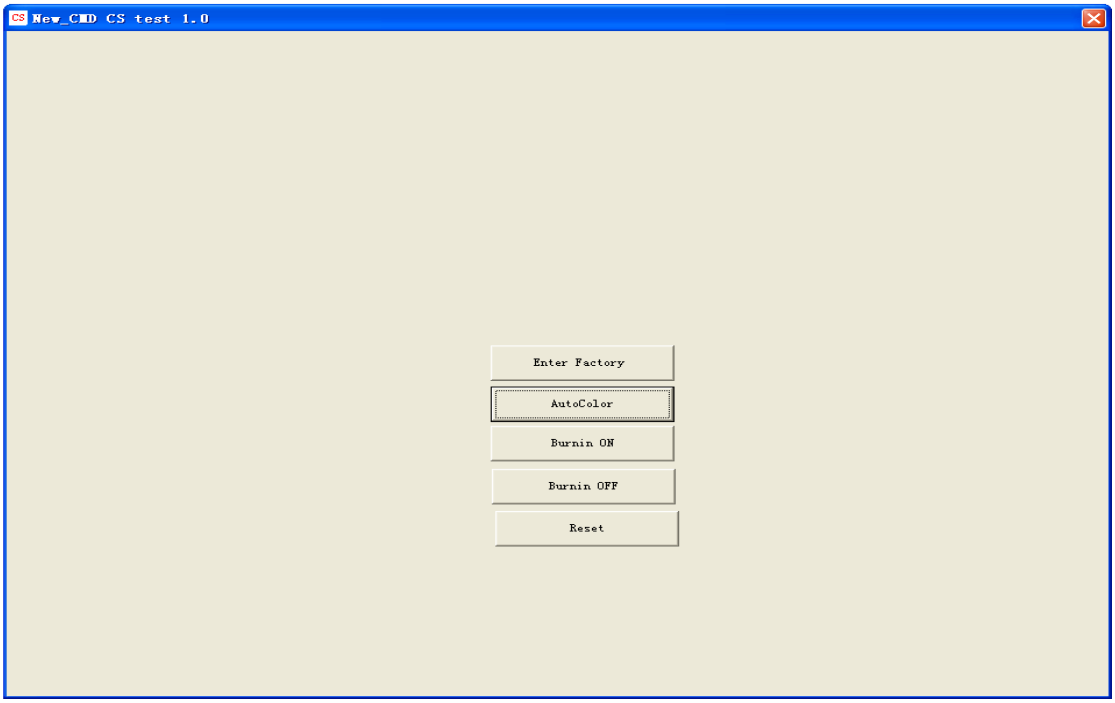
sRGB color temp. parameter is x = 313 ±20, y = 329 ±20

3. Enter into the factory mode

A. USE the tool

, double-click the icon

and choose”Enter Factory” You will enter into the factory mode



B. Press the MENU button,Pull out the power cord, then plug the power cord. Then the factory OSD will be at the left top of the panel.

4. Gain adjustment:

Move cursor to “-F-” and press MENU key

A. Adjust Warm (6500K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 313 ±20, y = 329 ±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

B. Adjust Normal (7300K) color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 301 ±20, y = 317 ±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

C. Adjust Cool (9300K) color-temperature

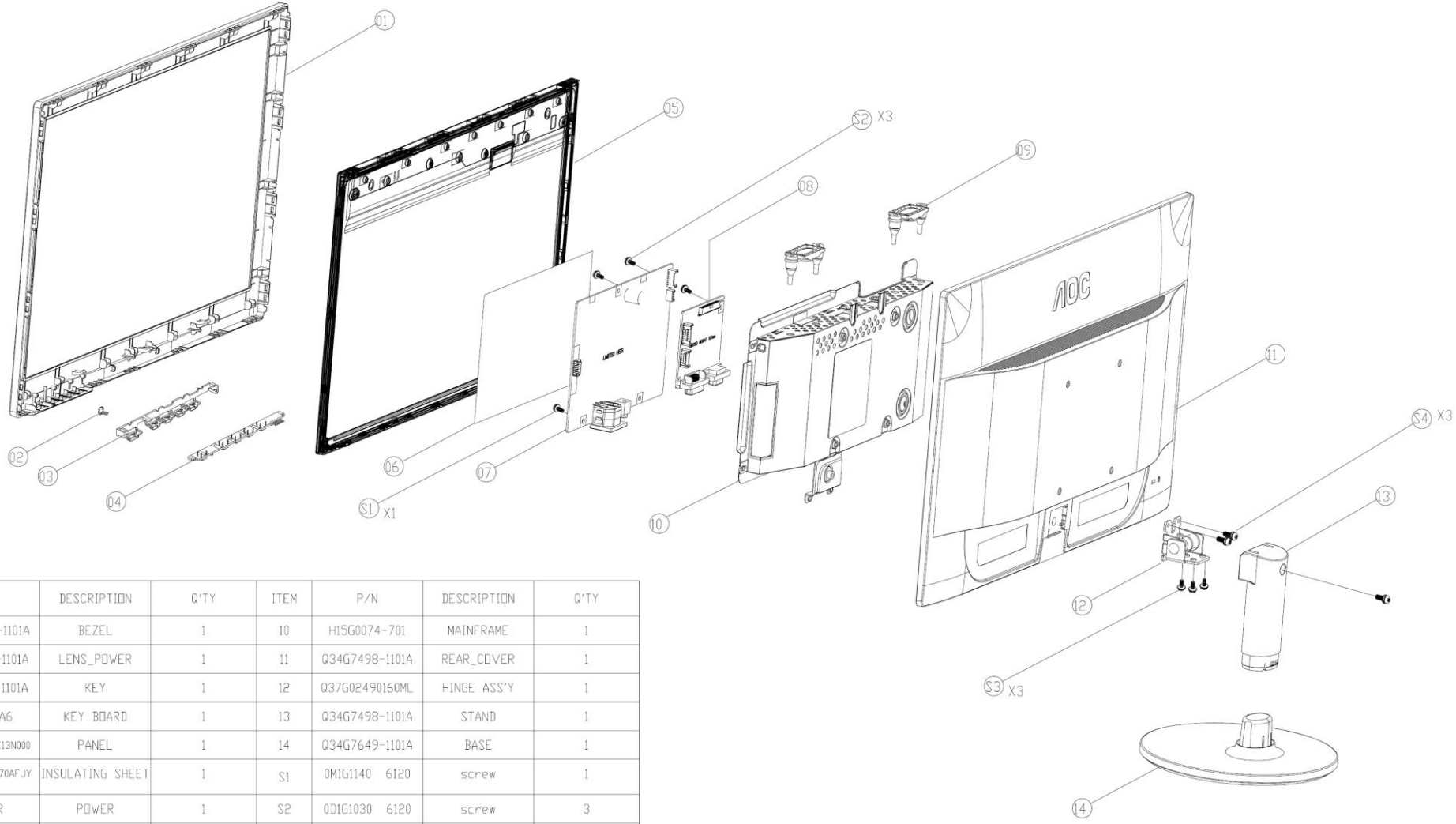
1. Switch the Chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM. Channel to Channel 9 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 283 ±20, y = 297 ±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reached the value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

D. Adjust sRGB color-temperature

1. Switch the chroma-7120 to **RGB-Mode** (with press “MODE” button)
2. Switch the MEM.channel to Channel 10 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 313 ±20, y = 329 ±20
4. Adjust the RED on factory window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on factory window until chroma 7120 indicator reachedthe value G=100
6. Adjust the BLUE on factory window until chroma 7120 indicator reached the value B=100
7. Repeat above procedure (item 4, 5, 6) until chroma 7120 RGB value meet the tolerance =100±2

E. Turn the Power-button off to quit from factory mode.

10. Monitor Exploded View



ITEM	P/N	DESCRIPTION	Q'TY	ITEM	P/N	DESCRIPTION	Q'TY
1	Q34G7647-1101A	BEZEL	1	10	H15G0074-701	MAINFRAME	1
2	Q33G0520-1101A	LENS_POWER	1	11	Q34G7498-1101A	REAR_COVER	1
3	Q33G0519-1101A	KEY	1	12	Q37G02490160ML	HINGE ASS'Y	1
4	KEPCCHA6	KEY BOARD	1	13	Q34G7498-1101A	STAND	1
5	750GBM195FGK13N000	PANEL	1	14	Q34G7649-1101A	BASE	1
6	Q52G1801MNT170AFJY	INSULATING SHEET	1	S1	0M1G1140 6120	screw	1
7	POWER	POWER	1	S2	0D1G1030 6120	screw	3
8	PLPCC9311MHD1	PLPCC9311MHD1	1	S3	AM1G1740 10125	screw	3
9	LABA	LABA	2	S4	AM1G1740 10225 CR3	screw	3

11. BOM List

Note: The parts information listed below are for reference only, and are subject to change without notice. Please go to http://cs.tpv.com.cn/hello1.asp for the latest information.

T9CGHG7BFXACD1E

Location	Part No.	Description	Remark
	052G 2191 A	PAPER TAPE	
HDCP-SMT	070GHDCP500HDC	HDCP CODE	
E08904	089G 17356G581	AUDIO CABLE 1.8M BLACK without PE bag	
E08902	089G 728HAA DB	D-SUB CABLE 1800mm	
E08903	089G1748GAA AC	SIGNAL CABLE DVI GREATLAND	
E08901	089G404A18N HL	AC POWER CORD 1800 for Europe	
ECN804	095G8014 6DE45	HARNESS 6P(CI1406)-6P(2008) 140	
	0D1G1030 6120	screw	
	0M1G1140 6120	screw	
SP01	378G0025518YAB	SPEAKER 4 OHM 2.5W 40X20 50mm NO	
ECNSP01	395G801404T650	HARNESS 4P(2008)-2P+2P 40+140	
	708G910701SH01	40"(2024/1012)SLIPSHEET EU	
E750	750GBG190E9D13N000	LCD LM190E09-TLD1 GZ LGD	
	AM1G1740 10125	SCREW	
	AM1G1740 10225 CR3	SCREW	
	H15G00747010GH	MAINFRAME	
	H40G 001624 1A	CARTON LABEL BARCODE 1	
	H40G 45762413B	P/N LABEL FOR BASE	
	H40G000261553A	TCO'05 EPA LABEL	
	H40G020N61554A	RATING LABEL E2060SwD EU	
	H44G91071010TW	CUSHION	
	H44G91072010TW	CUSHION	
	H44G910761501A00HX	ARTWORK CARTON E960SRDA WW	
	H70G22C161503E	CD MANUAL 60th	
	KEPCCHA9	KEY BOARD	
	PLPCC9451GHE2	ADAPTER BOARD	
	Q33G0519ABJ 1S0130	KEY	
	Q33G0520 1 1C0100	LENS_POWER	
	Q34G7498ABJ 2S0100	STAND	
	Q34G7647AEDA1S0101	BEZEL	
	Q34G7648ABJ 1S0130	REAR_COVER	
	Q34G7649ABJ 1S0130	BASE	
	Q37G02490160ML	HINGE ASS'Y	
	Q45G8801M08A0100BX	MANUAL PE BAG	
	Q45G990161940600BX	PROTECT BAG	

M05201	Q52G100204500A00JY	AL FOIL	
E05201	Q52G100204500A00JY	AL FOIL	
M05202	Q52G100204500A00JY	AL FOIL	
M05203	Q52G100204500A00JY	AL FOIL	
	Q52G1801MNT170AFJY	INSULATING SHEET	
	Q52G6019 14	TAPE	
ECN410	S95G179T30NH85	FFC CABLE 30P 212 1.0MM	
	Q50G 4 10	TIE (Y1900221)	
	Q52G1301024A0100YY	BIG CARTON TAPE FOR AOC 60MM	
	756GHCCB0BV0100001	MAIN BOARD-CBPCCHGA1H1	
SMTCC-U402	100GAHG9002W11	MCU ASSY-056G2233501	
CN404	033G3802 6B Y	CONN 6PIN 2.0	
CN701	033G3802 9B Y	CONNECTOR 9P 2.0	
CN410	033G801930F CH L	FFC CONN 1.0mm 30P R/A 34mm 6mm	
R718	061G152M33964L SY	RST MOFR 3.3 OHM +-5% 2WS SHANG YU	
CN101	088G 35315F HD	D-SUB CONN 15P BLUE - R/A	
CN102	088G 35424F XH	DVI CONN WITH SCREW 24P R/A	
X401	093G 2258B J	CRYSTAL 24.576MHz 20PF 49US	
	709G53060HM001	COMSUMPTIVE ASSY	
	H40G 45762429A	LABEL	
LED001	381G00122YG0GP	LED yellow/green GP32032M/P310-ZY-30	
CN001	395G820H06D545	HARNESS 6P(SANW)-6P(2008) 250mm	
	709G53570HM001	COMSUMPTIVE ASSY	
GND1	009G6005 1	GND TERMINAL	
U902	056G 139 9	IC EL817M(X) photocoupler DIP-4	
U601	056G 616 85	AUDIO APA2603JI-TUG 3W DIP-16	
NR901	061G 58809MEN	RST NTCR 8OHM +/20%/NMM01 4A XIANZHENG	
C908	063G107K334 6S	CAP X2 330NF 10% 275V BULK (B)	
C907	067G 40Z10115H	EC 100UF 20% 450V 18*35	
L901	073G 174 65 H2	LINE FILTER 30mH MIN	
L906	073G 253 91 V1	CHOKE COIL 1.1UH 30% 3LFDR0810-1R0K, HF	
L907	073G 253 91 V1	CHOKE COIL 1.1UH 30% 3LFDR0810-1R0K, HF	
CN901	087G 501 32 HC	AC SOCKET 3P DB-14-05 R/A	
CN601	088G 30214K DC	PHONE JACK 5P GREEN -	
BD901	093G 50460519	BRIDGE KBP206G X0 2A 800V KBP 80A	
D901	093G 60322	SCHOTTKY SR5150-MK23 5A 150V D0-27	
D902	093G 60322	SCHOTTKY SR5150-MK23 5A 150V D0-27	
D909	093G 60519	DIODE SR560-MK23 5A/60V DO-27 SECOS	
D905	093G 60519	DIODE SR560-MK23 5A/60V DO-27 SECOS	
D801A	093G 60924	DIODE SR510-22 DO-201AD	

CN902	095G 825 9D549	HARNESS 9P(SCN)-9P(2008) 100MM	
CN602	311GW200A04ABX	WAFER 2.0mm 4P	
CN804	311GW200A06ABX	WAFER 2.0mm 6P	
L801	373G0253214DN2	BOOST CHOKE 47UH 10% 2A --	
	705GHC57029	--	
	709G4497 HM001	CONSUMPTIVE ASS'Y	
	H40G 45762429A	LABEL	
T901	S80GL22T3V6	X'FMR 490UH 7% 4UH EER28 --	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
C709	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C713	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C710	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C706	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C701	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
C445	067G 3051013PB	EC 105C 100uF M 16V 5*11mm JH CD263	
R003	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R001	061G0603101 JT	RST CHIP 100R 1/10W 5% TZAI YUAN	
R002	061G0603102 JT	RST CHIP 1K 1/10W 5% TZAI YUAN	
R004	061G0603202 JT	RST 0603 2K 5% 1/10W	
R005	061G0603202 JT	RST 0603 2K 5% 1/10W	
ZD007	093G 64 59 SU	ESD MLVS0603M04 0603	
ZD006	093G 64 59 SU	ESD MLVS0603M04 0603	
ZD004	093G 64 59 SU	ESD MLVS0603M04 0603	
ZD005	093G 64 59 SU	ESD MLVS0603M04 0603	
ZD002	093G 64 59 SU	ESD MLVS0603M04 0603	
ZD001	093G 64 59 SU	ESD MLVS0603M04 0603	
ZD003	093G 64 59 SU	ESD MLVS0603M04 0603	
HS1	090G6064 1	HEAT SINK	
	0M1G 930 8120	SCREW 3x8	
Q901	357G0667941A01	MOSFET P0765GTF 7 650 TO-220F	
	055G 23524	WELDING FLUX WITHOUT PB	
	Q51G 6 4509	GLUE_RTV	
	Q55G 100625	TIN STICK_LOW ARGENTUM	
U901	056G 379529	AC/DC CONVERTER IC LD7576AGR SOP-7	
Q801	057G 763 92	FET P8008HV 4A/80V SOP-8	
R610	061G0603000 JF	RST CHIPR MAX 0R05 1/10W FENGHUA	
R612	061G0603103 JF	RST CHIPR 10K OHM +-5% 1/10W FENGHUA	
R605	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R603	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R604	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	

R609	061G0603103 JT	RST CHIP 10K 1/10W 5% TZAI YUAN	
R607	061G0603562 JF	RST 0603 5.6K 5% 1/10W	
R606	061G0603562 JF	RST 0603 5.6K 5% 1/10W	
RJ801	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R820	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R819	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R828	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R608	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R818	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R821	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R822	061G0805000 JF	RST CHIPR 0 OHM +-5% 1/8W FENGHUA	
R804	061G0805100 JF	RST CHIPR 10 OHM +-5% 1/8W FENGHUA	
R928	061G08051001FF	RST CHIPR 1KOHM +-1% 1/8W FENGHUA	
R827	061G08051008FT	RST 0805 1R 1% 1/8W	
R825	061G08051008FT	RST 0805 1R 1% 1/8W	
R824	061G08051008FT	RST 0805 1R 1% 1/8W	
R826	061G08051008FT	RST 0805 1R 1% 1/8W	
R907	061G0805102 JT	RST CHIPR 1K OHM +- 5% 1/8W TZAI YUAN	
R801	061G0805103 JF	RST CHIPR 10K OHM +-5% 1/8W FENGHUA	
R926	061G0805103 JT	RST 0805 10K 5% 1/8W	
R805	061G0805104 JY	RST CHIPR 100KOHM 1/8W YAGEO	
R807	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R808	061G0805109 JF	RST CHIPR 1 OHM +- 5% 1/8W FENGHUA	
R919	061G08051500FT	RST CHIPR 150OHM +-1% 1/8W TZAIYUAN	
R815	061G0805164 JF	RST 0805 160K 5% 1/8W	
R811	061G08052002FT	RST CHIP 20K 1/8W 1%	
R916	061G08052002FT	RST CHIP 20K 1/8W 1%	
R810	061G08052002FT	RST CHIP 20K 1/8W 1%	
R935	061G08052002FT	RST CHIP 20K 1/8W 1%	
R809	061G08052203FF	RST CHIPR 220KOHM +-1% 1/8W FENGHUA	
R802	061G0805304 JF	RST CHIPR 300KOHM +-5% 1/8W FENGHUA	
R920	061G08054701FF	RST CHIPR 4.7KOHM +-1% 1/8W FENGHUA	
R905	061G0805471 JT	RST CHIPR 470OHM +-5% 1/8W TZAI YUAN	
R806	061G0805512 JF	RST CHIPR 5.1KOHM +-5% 1/8W FENGHUA	
R816	061G08055601FF	RST CHIPR 5.6KOHM +-1% 1/8W FENGHUA	
R925	061G08059311FF	RST CHIPR 9.31KOHM +-1% 1/8W FENGHUA	
RJ603	061G1206000 JF	RST CHIPR MAX0R05 1/4W FENGHUA	
RJ602	061G1206000 JF	RST CHIPR MAX0R05 1/4W FENGHUA	
F801	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	
RJ601	061G1206000 JT	RST CHIPR MAX0R05 1/4W TZAI YUAN	

R917	061G1206100 JT	RST CHIPR 10 OHM +-5% 1/4W TZAI YUAN	
R817	061G12061001FT	RST CHIP R 1Kohm +-1% 1/4W	
R912	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R910	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R903	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R930	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R929	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R909	061G1206101 JT	RST CHIPR 100 OHM +-5% 1/4W TZAI YUAN	
R911	061G1206103 JF	RST CHIPR 10KOHM +-5% 1/4W FENGHUA	
R908	061G1206103 JT	RST CHIPR 10KOHM +-5% 1/4W TZAI YUAN	
R602	061G1206103 JT	RST CHIPR 10KOHM +-5% 1/4W TZAI YUAN	
R913	061G1206109 JT	RST CHIPR 1 OHM +-5% 1/4W TZAI YUAN	
R923	061G1206221 JT	RST CHIPR 220 OHM +-5% 1/4W TZAI YUAN	
R813	061G1206308 JT	RST 1206 0.3R 5% 1/4W	
R812	061G1206308 JT	RST 1206 0.3R 5% 1/4W	
R902	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R901	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
R900	061G1206624 JF	RST CHIPR 620KOHM +-5% 1/4W FENGHUA	
C618	065G060322131J F	CAP CHIP 0603 220PF J 50V NPO	
C617	065G060322131J F	CAP CHIP 0603 220PF J 50V NPO	
C619	065G060322131J F	CAP CHIP 0603 220PF J 50V NPO	
C620	065G060322131J F	CAP CHIP 0603 220PF J 50V NPO	
C602	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C601	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C606	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C603	065G060347412K Y	CAP CHIP 0.47uF 16V +/-10% X7R	
C812	065G080510131J Y	CAP CHIP 0805 100P 50V NP0 +/-5%	
C813	065G080510131J Y	CAP CHIP 0805 100P 50V NP0 +/-5%	
C611	065G080510131J Y	CAP CHIP 0805 100P 50V NP0 +/-5%	
C610	065G080510131J Y	CAP CHIP 0805 100P 50V NP0 +/-5%	
C815	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C923	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C914	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C906	065G080510232K F	CAP 0805 1000PF 10% 50V X7R	
C802	065G080510332K F	CAP 0805 10NF K 50V X7R	
C915	065G080510332K F	CAP 0805 10NF K 50V X7R	
C814	065G080510432K A	CAP CHIP 0805 0.1UF K 50V X7R	
C612	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C924	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C926	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	

C912	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C613	065G080510432K Y	CAP CHIP 0805 100N 50V X7R +/-10%	
C609	065G080510522K T	CAP 0805 1UF 10% 25V X7R	
C608	065G080510522K T	CAP 0805 1UF 10% 25V X7R	
C807	065G080533332K F	CAP 0805 33NF K 50V X7R	
C927	065G080547332K F	CAP CHIP 0805 47NF K 50V X7R	
C810	065G080547432K A	CAP CHIP 0805 0.47UF K 50V X7R	
C811	065G080547432K A	CAP CHIP 0805 0.47UF K 50V X7R	
C805	065G080547432K F	0805 0.47UF K 50V X7R	
C804	065G080547432K T	CAP CHIP 0805 0.47UF K 50V X7R	
C928	065G120622272K A	CAP 1206 2.2NF 10% 500V X7R	
C916	065G120622272K A	CAP 1206 2.2NF 10% 500V X7R	
C917	065G120622272K A	CAP 1206 2.2NF 10% 500V X7R	
C929	065G120622272K A	CAP 1206 2.2NF 10% 500V X7R	
FB603	071G 56K121 M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
FB602	071G 56K121 M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
FB604	071G 56K121 M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
FB601	071G 56K121 M	CHIP BEAD 120OHM 6A MGLB2012-120T-LF	
U801	356G0700045	LED DRIVER PF7024 S SOP-16	
	709G4497 HS001	CONSUMPTIVE ASS'Y	
SW003	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW004	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW002	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW005	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
SW001	077G603S AI HJ	TACT SWITCH AI 2PIN SEALED	
E715	715G5357K03000001M	KEY PCB FR1 SS 117*10*1.6MM	
R924	061G152M47852T SY	RST MOFR 0.47 OHM +-5% 2WS FUTABA	
	709G4497 HA001	CONSUMPTIVE ASS'Y	
FB801	071G 55 29	FERRITE BEAD	
J809	095G 90 23	JUMP WIRE - -	
C801	367G215X3314AT	EC 330UF 20% 25V 10*12 RF	
Q904	057G 530503 T	2SD1207T	
J601	095G 90 23	JUMP WIRE - -	
R906	061G152M10452T SY	RST MOFR 100KOHM +-5% 2WS FUTABA	
ZD901	093G 3960252T	ZENER MTZJ20B 18.63-19.59V 0.5W DO-35	
J903	095G 90 23	JUMP WIRE - -	
J605	095G 90 23	JUMP WIRE - -	
J815	095G 90 23	JUMP WIRE - -	
C809	067G 4153309KT	EC 33UF 20% 100V 8*12 ED	
J603	095G 90 23	JUMP WIRE - -	

J921	095G 90 23	JUMP WIRE - -	
C903	065G306M10233R	CAP Y1 1NF 20% 250V Y5U	
CN901	006G 31500	EYELET	
J806	095G 90 23	JUMP WIRE - -	
F903	084G 56 4 C	FUSE 4A 250V MST 4A 250V	
C918	367G215X3314AT	EC 330UF 20% 25V 10*12 RF	
E715	715G4497P05000001C	PWR PCB FR1 CTI>600 SS 184*122*1.6	
C900	065G306M33233R	CAP Y1 3.3NF 20% 250V Y5U	
J805	095G 90 23	JUMP WIRE - -	
FB802	071G 55 29	FERRITE BEAD	
FB901	071G 55 29	FERRITE BEAD	
R904	061G152M47152T SY	RST MOF 470R 5% 2W FUTABA	
F902	084G 56 4 C	FUSE 4A 250V MST 4A 250V	
F901	084G 56 4 C	FUSE 4A 250V MST 4A 250V	
C920	067G 2046812KT	CAP CS 680UF 20% 10V 8*11 3900mA GP1A6	
FB902	071G 55 29	FERRITE BEAD	
FB803	071G 55 29	FERRITE BEAD	
C911	065G 2K152 2T6921	CAP CER 1500pF K 2KV Y5P	
J812	095G 90 23	JUMP WIRE - -	
J803	095G 90 23	JUMP WIRE - -	
U903	056G 563355	Shunt Regu TL431G-A-TA TO-92 42V 150mA	
D904	093G 6026T52T	CTIFIER DIODE FR107	
J606	095G 90 23	JUMP WIRE - -	
C604	367G415X4713AT	EC 470uf 20% 16V 10X13 RS	
J909	095G 90 23	JUMP WIRE - -	
J810	095G 90 23	JUMP WIRE - -	
J906	095G 90 23	JUMP WIRE - -	
C922	367G415X4713AT	EC 470uf 20% 16V 10X13 RS	
J602	095G 90 23	JUMP WIRE - -	
R915	061G 17222052T TZ	RST CFR 22R 5% 1/4W	
J908	095G 90 23	JUMP WIRE - -	
D903	093G 6026T52T	CTIFIER DIODE FR107	
J801	095G 90 23	JUMP WIRE - -	
C816	065G 2K102 2T6921	CAP CER 1000pF 2KV K Y5P	
D907	093G 6451652T	1N4148	
J813	095G 90 23	JUMP WIRE - -	
R922	061G152M47152T SY	RST MOF 470R 5% 2W FUTABA	
J804	095G 90 23	JUMP WIRE - -	
C902	065G306M10233R	CAP Y1 1NF 20% 250V Y5U	
C913	367G215X4707AT	EC 47uF 20% 50V - 6.3*11mm RG	

J905	095G 90 23	JUMP WIRE - -	
J907	095G 90 23	JUMP WIRE - -	
J904	095G 90 23	JUMP WIRE - -	
J811	095G 90 23	JUMP WIRE - -	
J901	095G 90 23	JUMP WIRE - -	
J807	095G 90 23	JUMP WIRE - -	
J910	095G 90 23	JUMP WIRE - -	
J802	095G 90 23	JUMP WIRE - -	
J808	095G 90 23	JUMP WIRE - -	
U401	056G 562A30	SCALER HX6822-A080LAG LQFP-100	
U703	056G 563 31	IC AZ1117D-1.8-E1	
U702	056G 563 52	LDO AP1117D33G-13	
U105	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U102	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U107	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U103	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U106	056G 662 52	ESD PROTECT AZC398-04S.R7G SOT23-6	
U104	056G1133531	EEPROM FM24C02A-SO-T-G 2K SOP-8	
U101	056G1133531	EEPROM FM24C02A-SO-T-G 2K SOP-8	
U402	056G2233501	FLASH MX25L2026DM1I-12G 2Mb SOP-8	
Q401	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q402	057G 417517	Tra LMBT3906LT1G -200mA/-40V SOT-23 LRC	
Q701	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q703	057G 417518	TRA LMBT3904LT1G 200mA/40V SOT-23 LRC	
Q706	057G 763940	MOSFET AO3401A SOT-23	
R418	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R417	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R423	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R432	061G0402000 JT	RST CHIPR MAX0R05 1/16W TZAI YUAN	
R112	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R134	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R132	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R107	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R130	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R108	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R127	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R103	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R128	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R131	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R133	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	

R104	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R113	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R129	061G0402100 JT	RST CHIP 10R 1/16W 5% TZAI YUAN	
R701	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R707	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R144	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R450	061G0402101 JT	RST CHIP 100R 1/16W 5% TZAI YUAN	
R439	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R135	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R438	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R437	061G0402102 JT	RST CHIP 1K 1/16W 5% TZAI YUAN	
R413	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R425	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R704	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R145	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R414	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R703	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R452	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R402	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R428	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R715	061G0402103 JT	RST CHIP 10K 1/16W 5% TZAI YUAN	
R716	061G0402104 JT	RST CHIP 100K 1/16W 5% TZAI YUAN	
R416	061G0402105 JT	RST CHIP R 1Mohm 1/16W +/-5% TZAI YUAN	
R415	061G0402153 JT	RST CHIP 15K 1/16W 5% TZAI YUAN	
R405	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R404	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R407	061G0402220 JT	RST CHIP 22R 1/16W 5% TZAI YUAN	
R115	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R429	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R116	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R424	061G0402222 JT	RST CHIP 2K2 1/16W 5% TZAI YUAN	
R141	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R123	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R705	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R714	061G0402223 JT	RST CHIP 22K 1/16W 5% TZAI YUAN	
R401	061G0402391 JT	RST CHIP 390R 1/16W 5% TZAI YUAN	
R435	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R434	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R436	061G0402392 JT	RST CHIP R 3K9 +/-5% 1/16W TZAI YUAN	
R120	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	

R126	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R125	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R119	061G0402470 JT	RST CHIP 47R 1/16W 5% TZAI YUAN	
R117	061G0402471 JT	RST CHIP 470R 1/16W 5% TZAI YUAN	
R109	061G0402471 JT	RST CHIP 470R 1/16W 5% TZAI YUAN	
R702	061G0402471 JT	RST CHIP 470R 1/16W 5% TZAI YUAN	
R118	061G0402471 JT	RST CHIP 470R 1/16W 5% TZAI YUAN	
R713	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R122	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R139	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R706	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R140	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R121	061G0402472 JT	RST CHIP 4K7 1/16W 5% TZAI YUAN	
R102	061G0402750 JT	RST 0402 75R 5% 1/16W	
R111	061G0402750 JT	RST 0402 75R 5% 1/16W	
R106	061G0402750 JT	RST 0402 75R 5% 1/16W	
R105	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R110	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R114	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R136	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R101	061G0603000 JT	RST CHIP MAX 0R05 1/10W TZAI YUAN	
R406	061G0603220 JT	RST CHIP 22R 1/10W 5% TZAI YUAN	
R433	061G0603471 JT	RST CHIPR 470OHM +-5% 1/10W TZAI YUAN	
R427	061G0603471 JY	RST CHIPR 470 OHM 5% 1/10W YAGEO	
R466	061G1206301 JT	RST CHIPR 300 OHM +-5% 1/4W TZAI YUAN	
R465	061G1206301 JT	RST CHIPR 300 OHM +-5% 1/4W TZAI YUAN	
C107	065G040210232K Y	CAP CHIP 0402 1N 50V X7R +/-10%	
C707	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C418	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C417	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C715	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C446	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C406	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C416	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C408	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C419	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C714	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C420	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C703	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C407	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	

C711	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C410	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C414	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C409	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C415	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C421	065G040210412K A	CAP CHIP 0402 100nF K 16V X7R	
C413	065G0402105A5K A	CAP CHIP 0402 1UF K 10V X5R	
C411	065G0402105A5K A	CAP CHIP 0402 1UF K 10V X5R	
C114	065G040222031J Y	CAP CHIP 0402 22P 50V NP0 +/-5%	
C115	065G040222031J Y	CAP CHIP 0402 22P 50V NP0 +/-5%	
C401	065G040222415K A	CAP 0402 220NF 10% 16V X7R	
C128	065G040222415K A	CAP 0402 220NF 10% 16V X7R	
C712	065G040222415K A	CAP 0402 220NF 10% 16V X7R	
C120	065G040222415K A	CAP 0402 220NF 10% 16V X7R	
C405	065G040233031J A	CAP 0402 33PF 5% 50V NP0	
C404	065G040233031J A	CAP 0402 33PF 5% 50V NP0	
C113	065G040247312K A	CAP 0402 47NF 10% 16V X7R	
C108	065G040247312K A	CAP 0402 47NF 10% 16V X7R	
C109	065G040247312K A	CAP 0402 47NF 10% 16V X7R	
C102	065G040247312K A	CAP 0402 47NF 10% 16V X7R	
C103	065G040247312K A	CAP 0402 47NF 10% 16V X7R	
C112	065G040247312K A	CAP 0402 47NF 10% 16V X7R	
C106	065G040250931C Y	CAP 0402 5PF 0.25pF 50V NP0	
C111	065G040250931C Y	CAP 0402 5PF 0.25pF 50V NP0	
C101	065G040250931C Y	CAP 0402 5PF 0.25pF 50V NP0	
C403	065G060310512K A	CAP 0603 1UF 10% 16V X7R	
C451	065G0805106A5K A	CAP 0805 10UF 10% 10V X5R	
C450	065G0805106A5K A	CAP 0805 10UF 10% 10V X5R	
FB413	071G 56K121 TA	CHIP BEAD 120R/6000mA HCB2012KF-121T60	
FB403	071G 59A121 TA	CHIP BEAD 120R/3000mA HCB1608KF-121T30	
FB406	071G 59A121 TA	CHIP BEAD 120R/3000mA HCB1608KF-121T30	
FB408	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB405	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB407	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB401	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB402	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB101	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
FB102	071G 59G301 TA	CHIP BEAD 300OHM 200mA FCM1608KF-301T02	
D102	093G 64 42SEM	SWITCHING BAV70 215mA 75V SOT-23	
D101	093G 64 42SEM	SWITCHING BAV70 215mA 75V SOT-23	

ZD101	093G 39GA01 T	RLZ5.6B	
ZD103	093G 39GA01 T	RLZ5.6B	
	709G53060HS001	COMSUMPTIVE ASSY	
E715	715G5306M02000004C	MAIN PCB FR4 DS 80*72*1.6MM	
	H52G 2191 1	美纹胶带	
	H52G1701 1	MESH PRINTTING_PAPER	